Figure 1

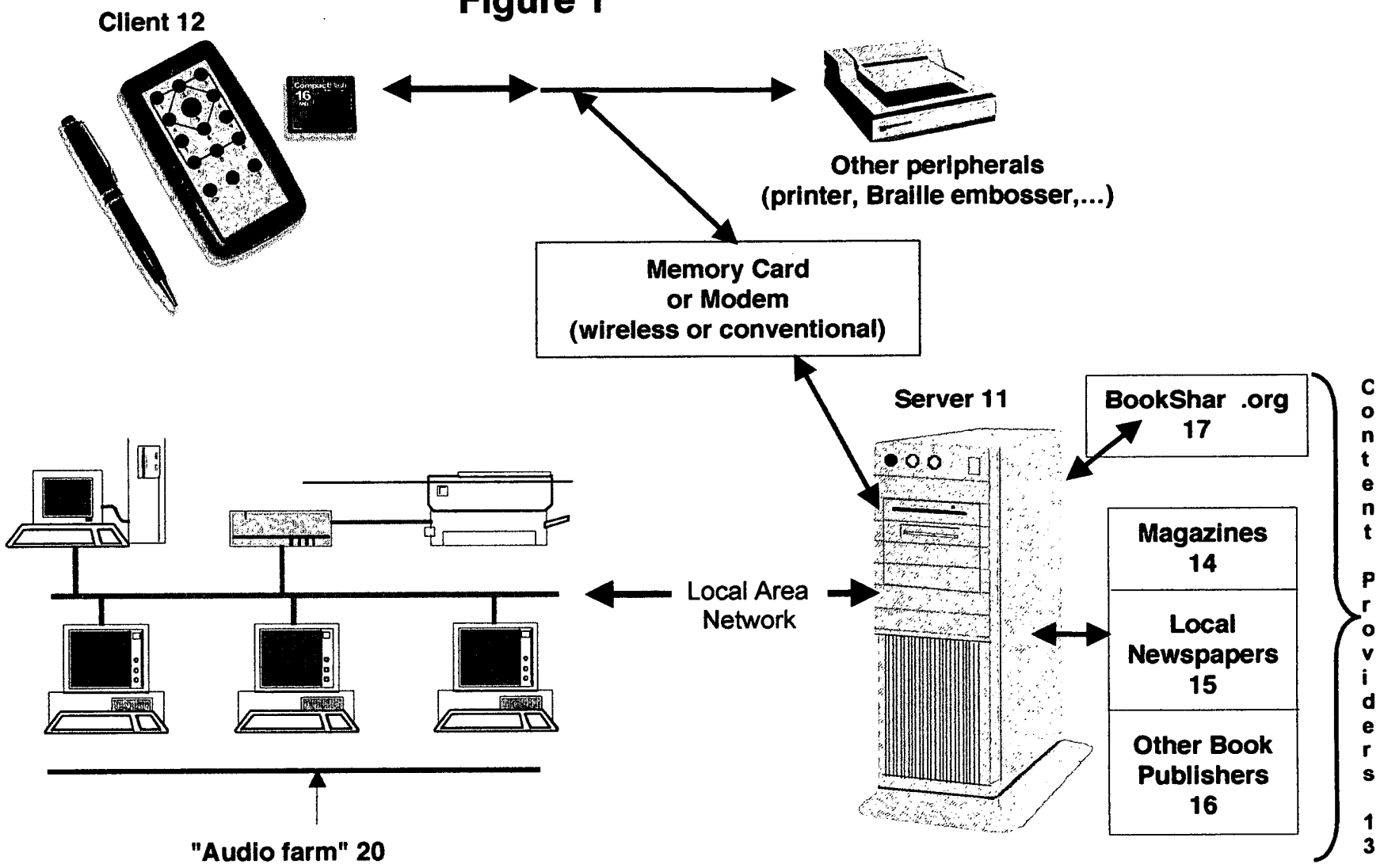

Client 12
Other peripherals
(printer, Braille embosser,...)
Memory Card
or Modem
(wireless or conventional)
Server 11
BookShar .org
17
Magazines
14
Local
Newspapers
15
Other Book
Publishers
16
Content Providers 13
Local Area
Network
"Audio farm" 20

Figure 2

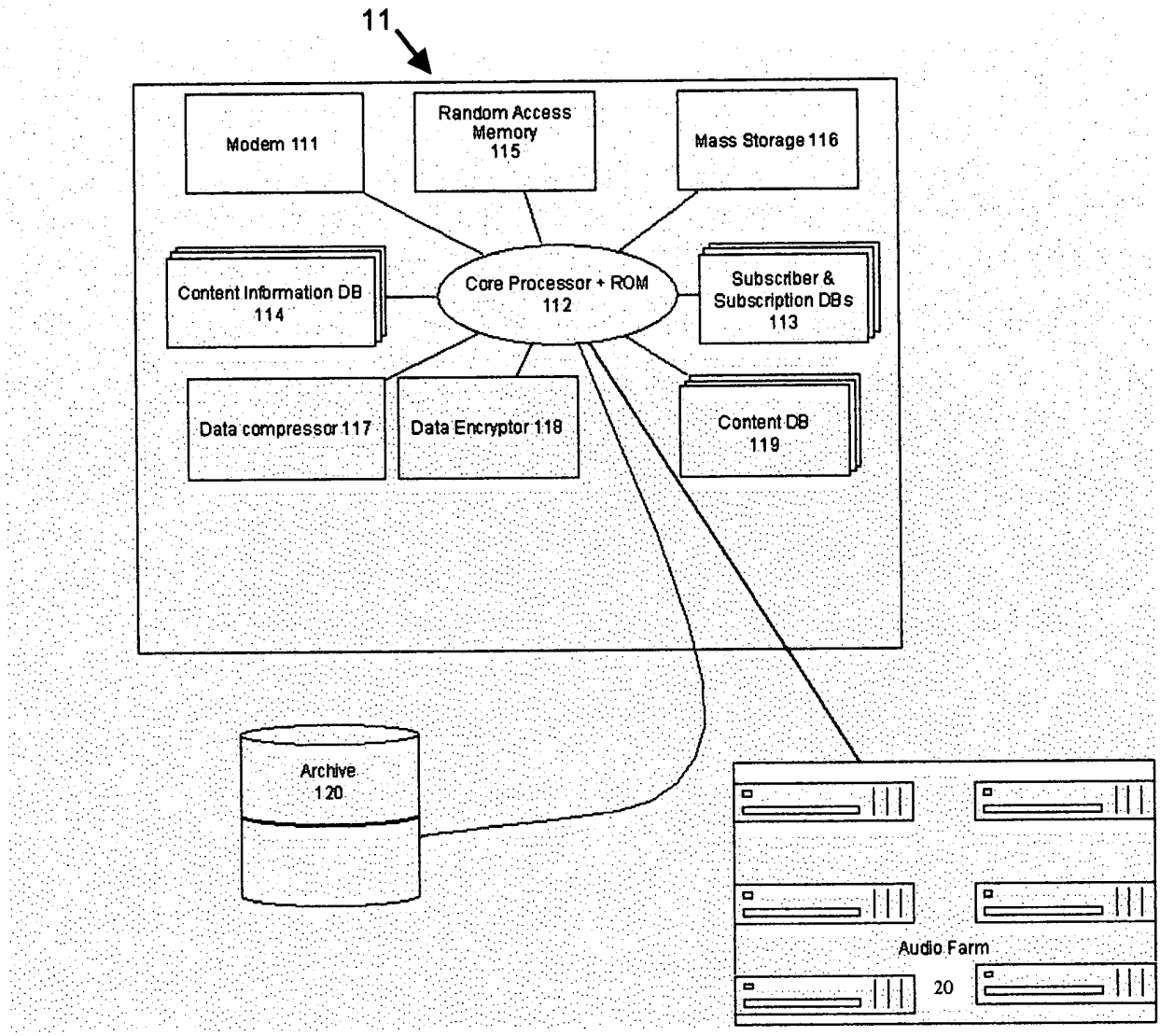

11
Modem 111
Random Access Memory 115
Mass Storage 116
Content Information DB 114
Core Processor + ROM 112
Subscriber & Subscription DBs 113
Data compressor 117
Data Encryptor 118
Content DB 119
Archive 120
Audio Farm
20

Figure 3

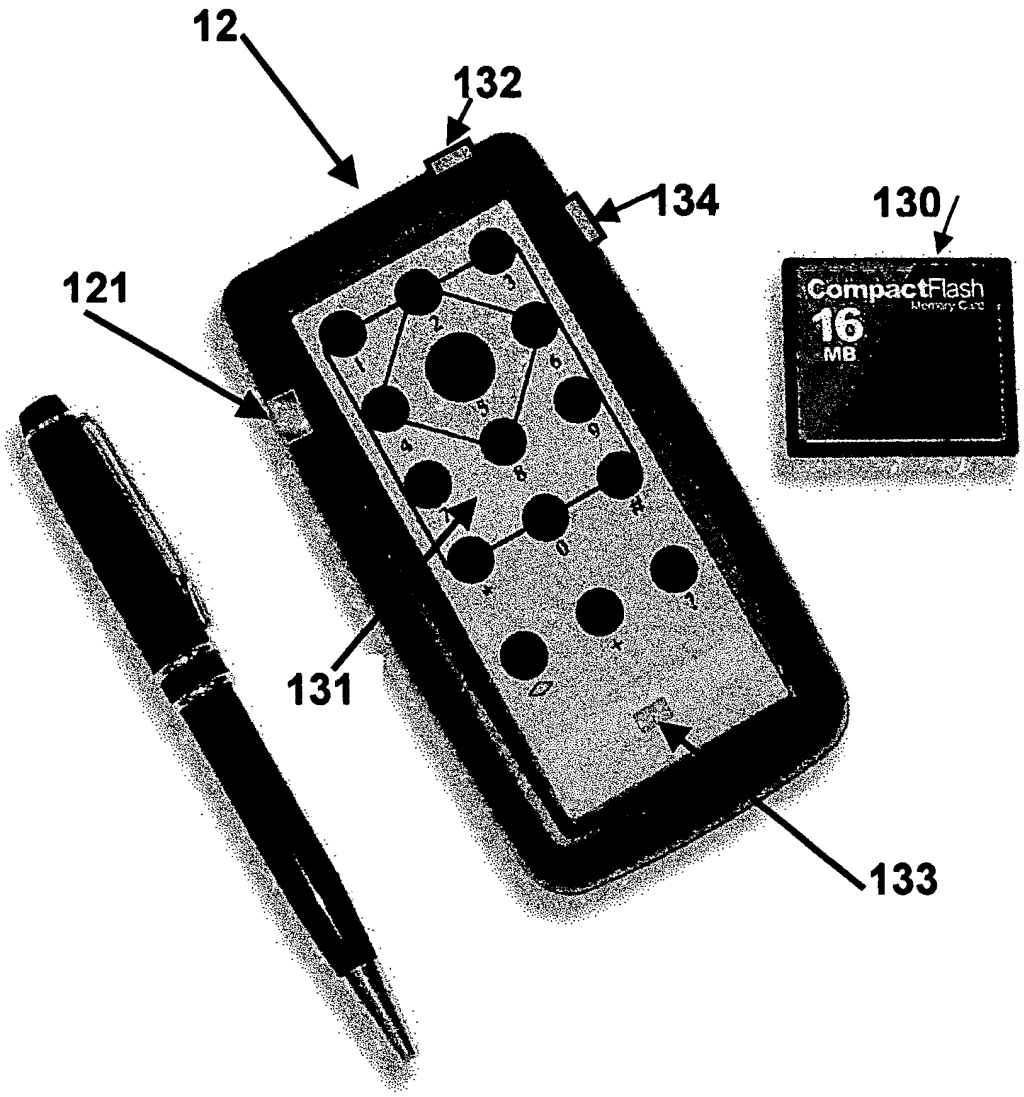


Figure 4

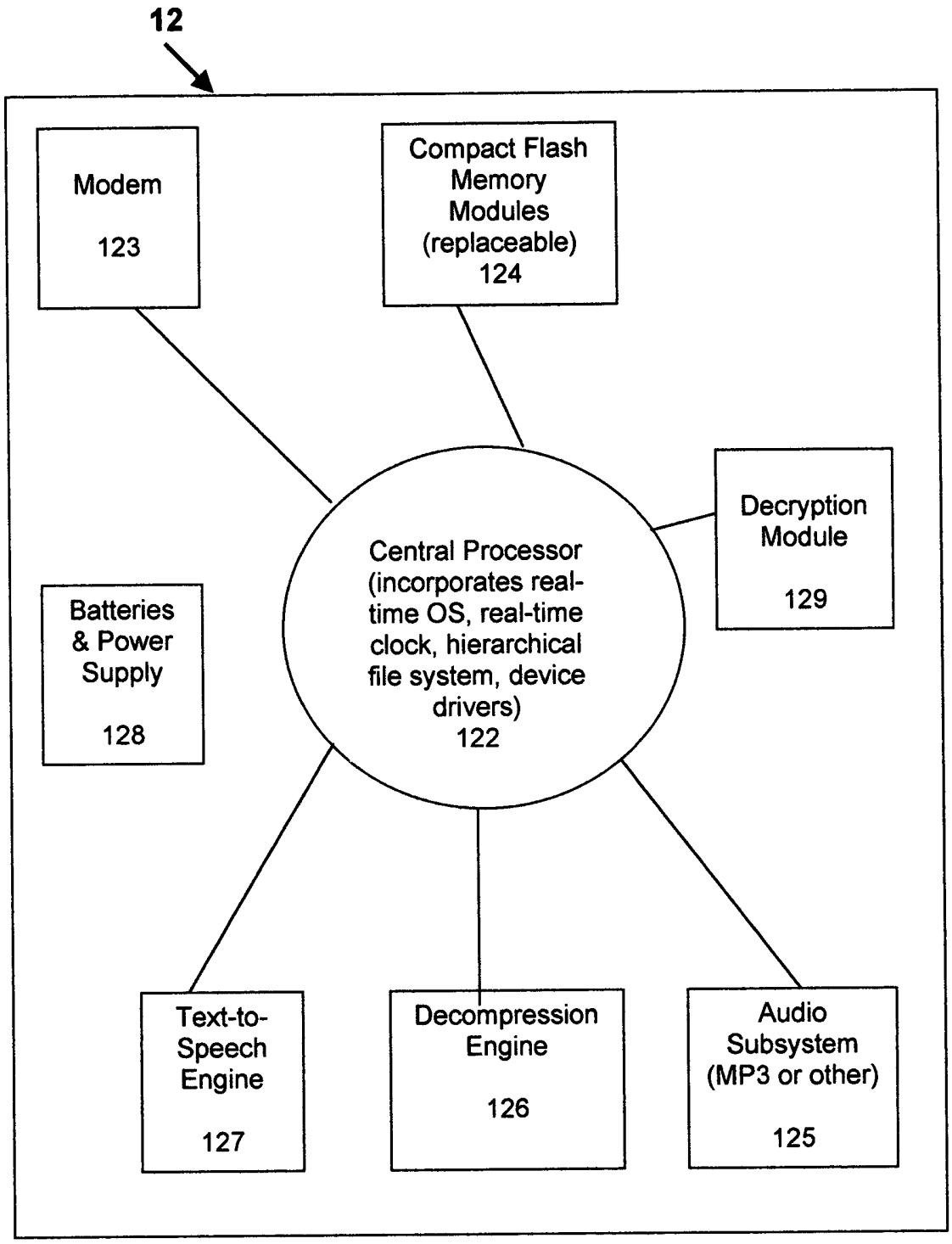

12
Modem
123
Compact Flash Memory Modules (replaceable)
124
Decryption Module
129
Central Processor (incorporates real-time OS, real-time clock, hierarchical file system, device drivers)
122
Batteries & Power Supply
128
Text-to-Speech Engine
127
Decompression Engine
126
Audio Subsystem (MP3 or other)
125

Figure 5

Fields in **bold** indicate pointers to other tables or files

Content ID	Title	Author	Type	Genre	Unit Cost	Version info	Access Date & Time Freq.	**File & Index Loc'ns.**	**Syn. Voice & Index Loc'ns**	**Provider Name, ID,Addr.**
202	204	206	208	210	212	214	216	218	220	222
CI1110111	The Human Stain	P. Roth	Book	Contemporary Novel	$3.25	Ed'n. 1 Ptg. 2	3/14/02 once	C1234567 C1234588	NULL	Bookshare.org P003765,www...
CI11103244	The General's Daughter	Nelson De Mille	Book	Contemporary Mystery	$3.40	Edn. 1 Ptg. 4	11/27/01 once	C8765432 C3456712	MP134957 MP135367	Bookshare.org P003765,www...
CI22234511	Berkeley Gazette	Null	Daily Newspaper	Null	$0.15	4/14/02	4/14/02 daily	C57262488 C57261122	Null	EB Publishers P002436,ww...
CI22235712	Harpers	Null	Magazine	General	$1.35	April, 2002	4/5/02 monthly	C14721 C14729	Null	Harper's Foundation P005467,www...

Figure 6

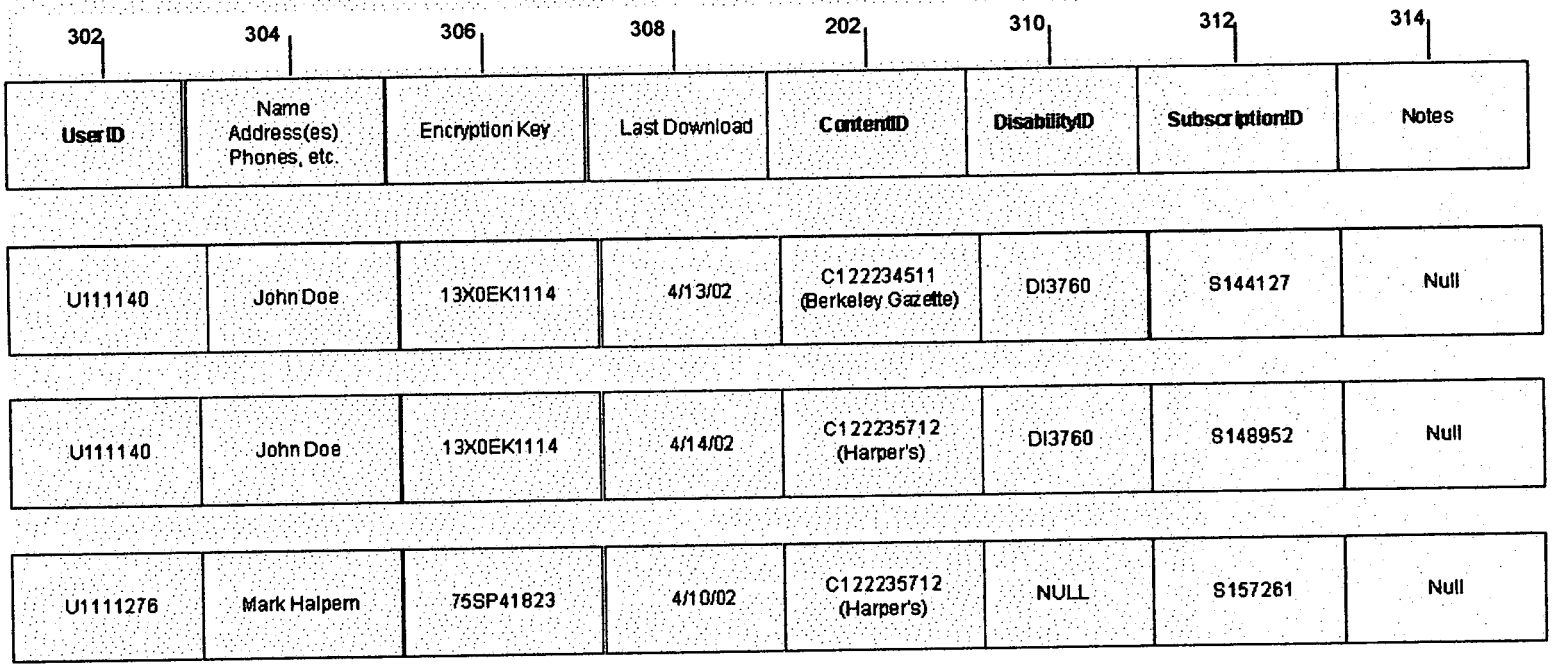

302
304
306
308
202
310
312
314
UserID
Name Address(es) Phones, etc.
Encryption Key
Last Download
ContentID
DisabilityID
SubscriptionID
Notes
U111140
John Doe
13X0EK1114
4/13/02
C122234511 (Berkeley Gazette)
DI3760
S144127
Null
U111140
John Doe
13X0EK1114
4/14/02
C122235712 (Harper's)
DI3760
S148952
Null
U1111276
Mark Halpern
75SP41823
4/10/02
C122235712 (Harper's)
NULL
S157261
Null

Figure 7

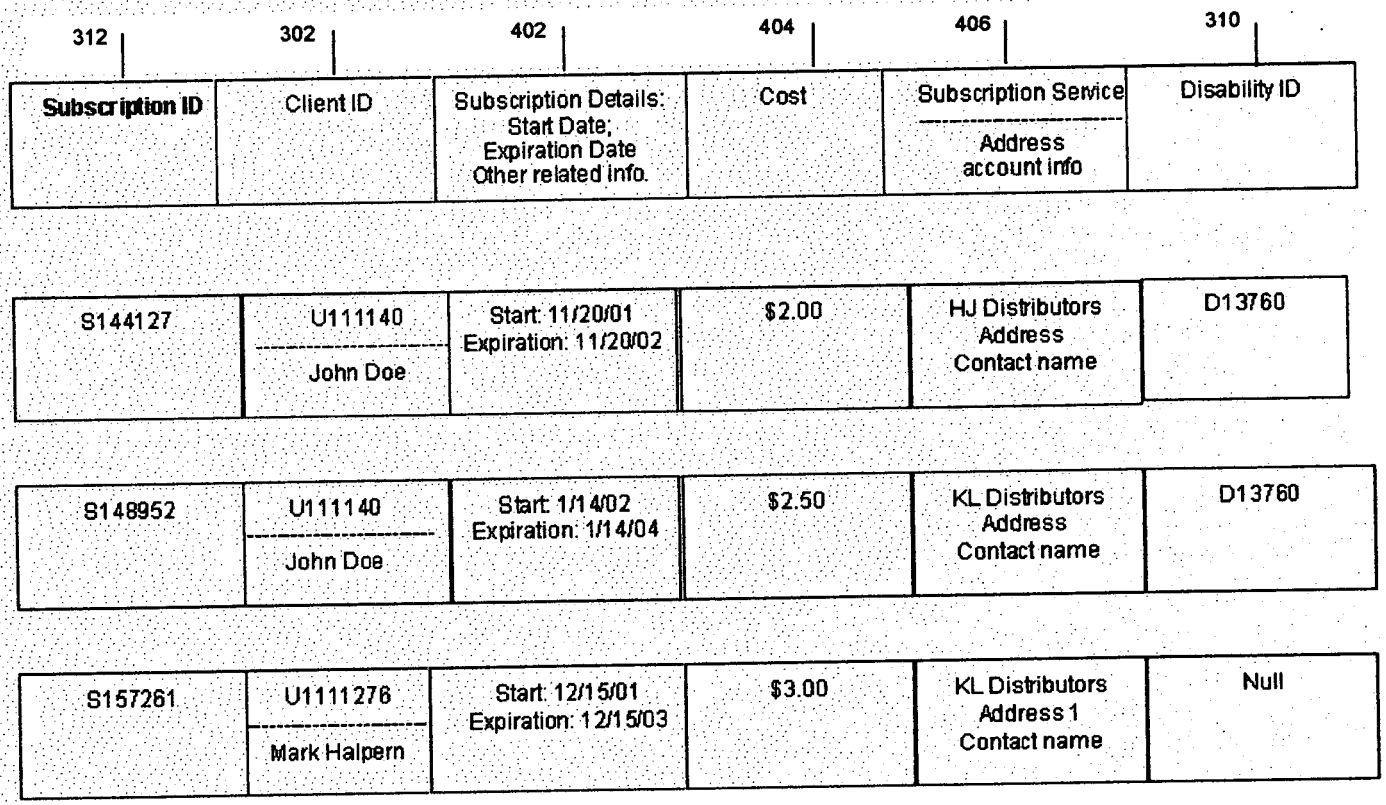

312
302
402
404
406
310
Subscription ID
Client ID
Subscription Details: Start Date; Expiration Date Other related info.
Cost
Subscription Service
Address account info
Disability ID
S144127
U111140
John Doe
Start: 11/20/01 Expiration: 11/20/02
$2.00
HJ Distributors Address Contact name
D13760
S148952
U111140
John Doe
Start: 1/14/02 Expiration: 1/14/04
$2.50
KL Distributors Address Contact name
D13760
S157261
U1111276
Mark Halpern
Start: 12/15/01 Expiration: 12/15/03
$3.00
KL Distributors Address 1 Contact name
Null

Figure 8: Content Updates

Process 600

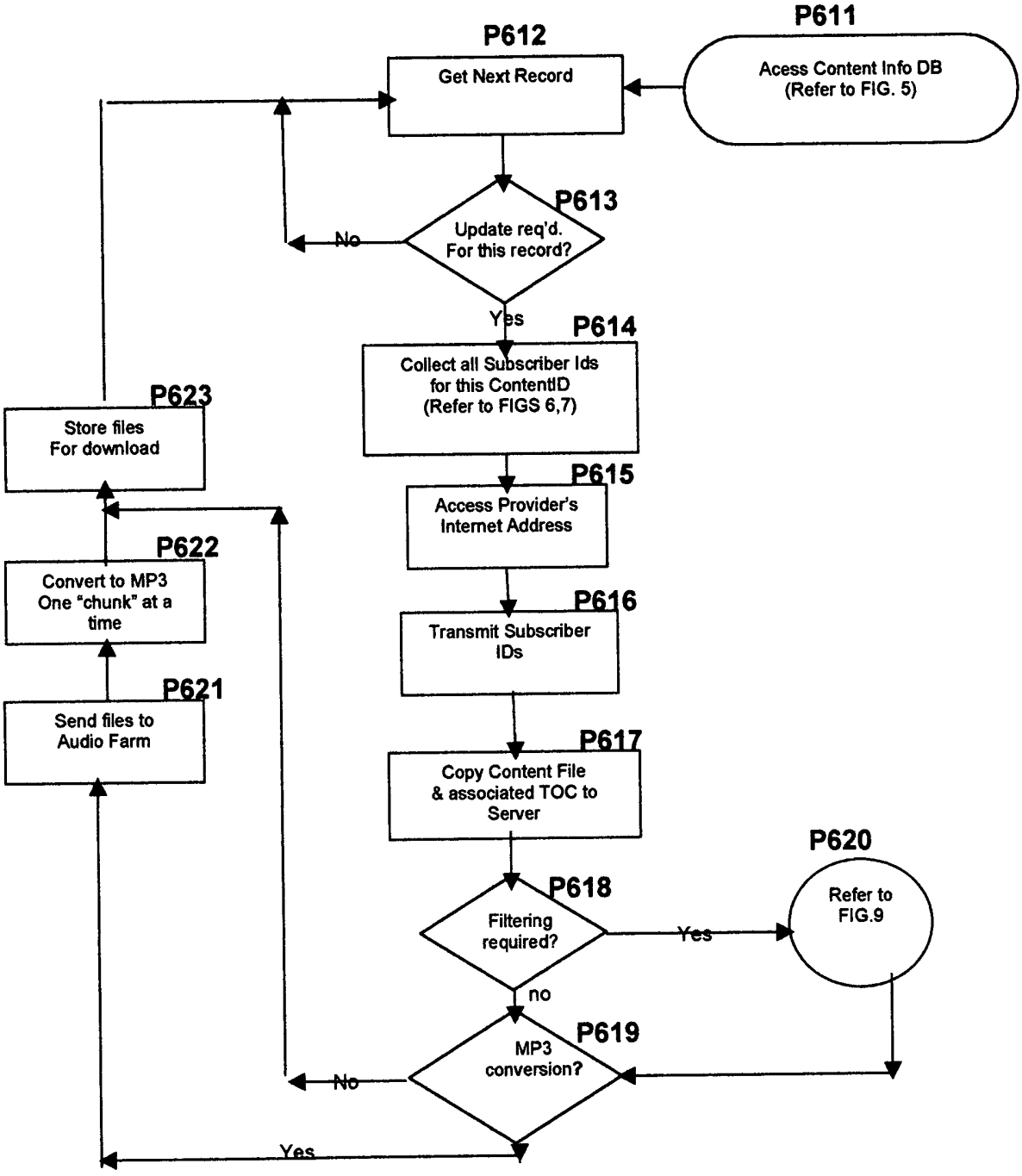


Figure 9: Filt ring a Content File

Process 620

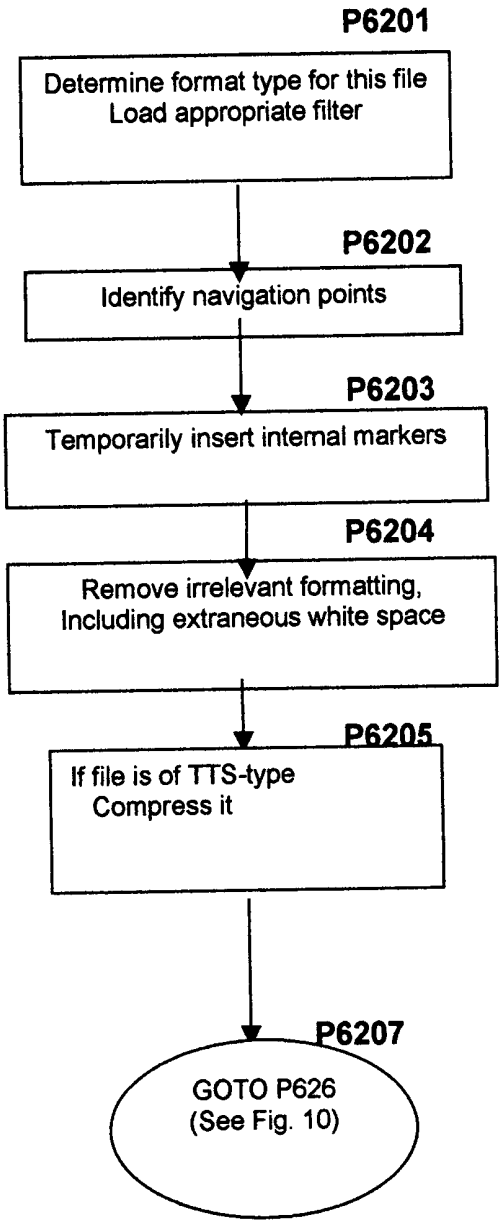


Figure 10: Building Navigation Tables

Process 626

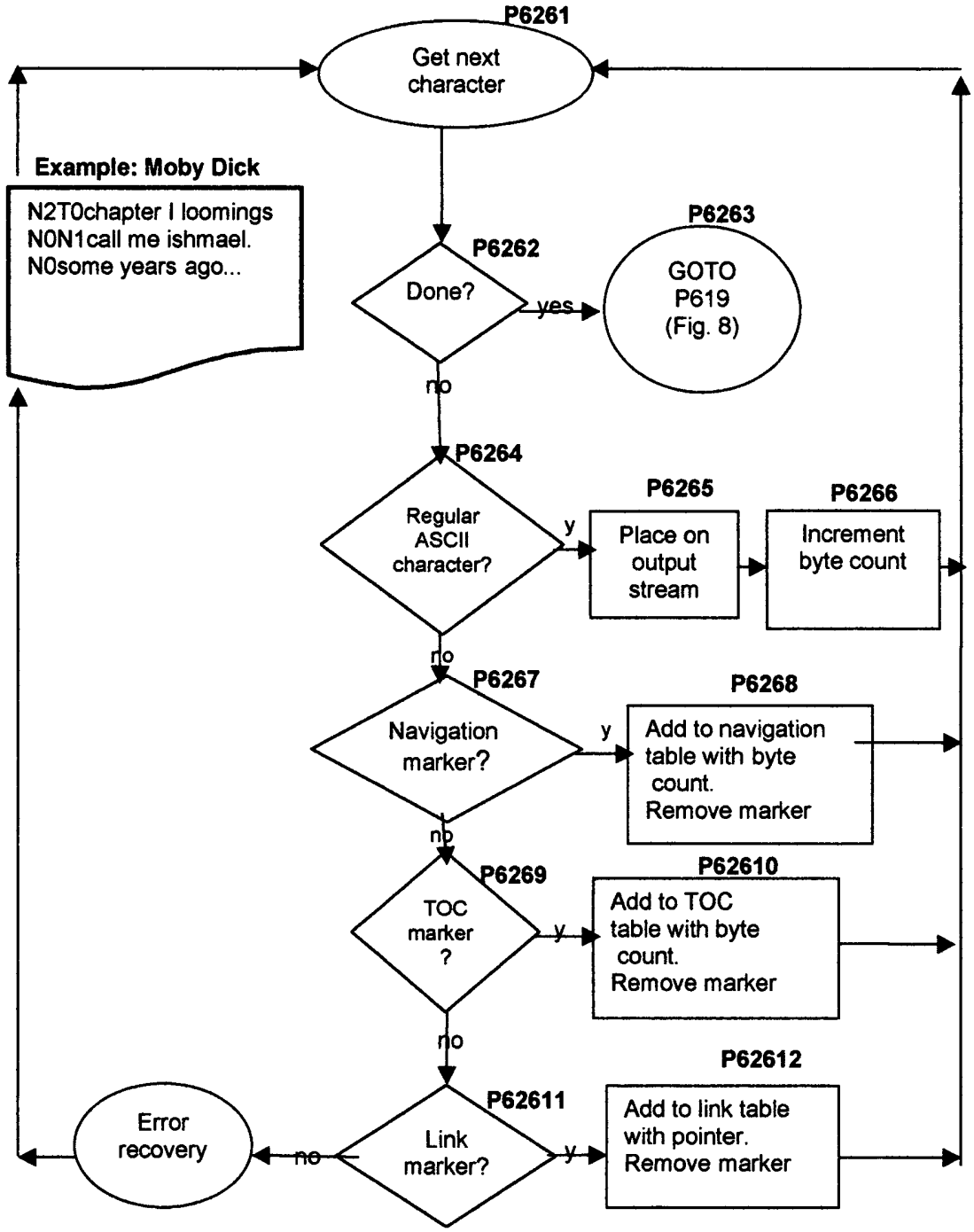


Figure 11

An Exampl of Index Tables

(excerpted from the first page of Moby Dick)

Partial Navigation Table

N2	0
N0	19
N1	19
N0	36

Partial Table of Contents

Title	Offset
T0Chapter I loomings	0

T0 - Chapter Mark
N0 - Begin Sentence Mark
N1 - Begin Paragraph Mark
N2 - Begin Page Mark

Figure 12

Example of "Virtual Library"
Folder and File Organization
in Client's File System --
partially exploded view

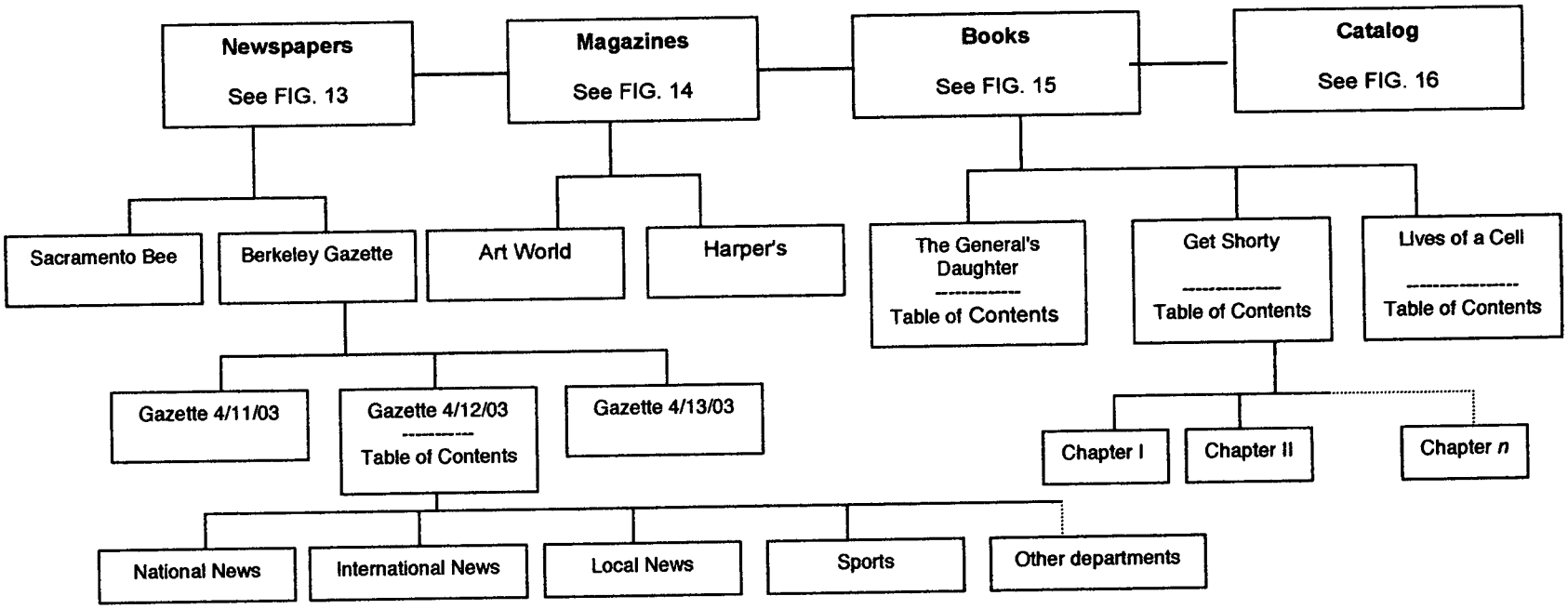


Figure 13

Exemplar of Navigation Levels Within A Newspaper - Partially Exploded View

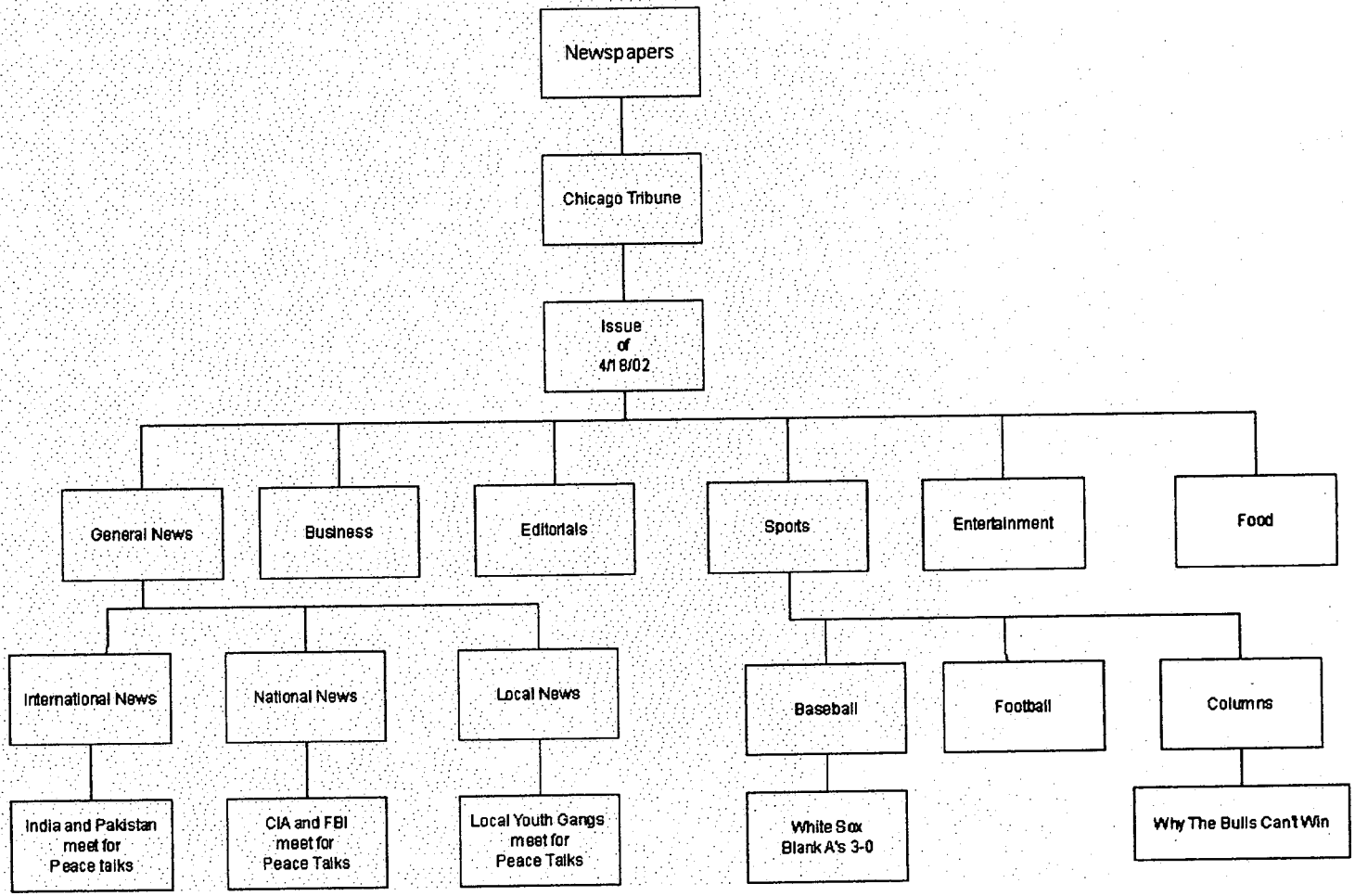


FIGURE 14

Exemplar of Navigation Levels Within Magazines
Partially Exploded View

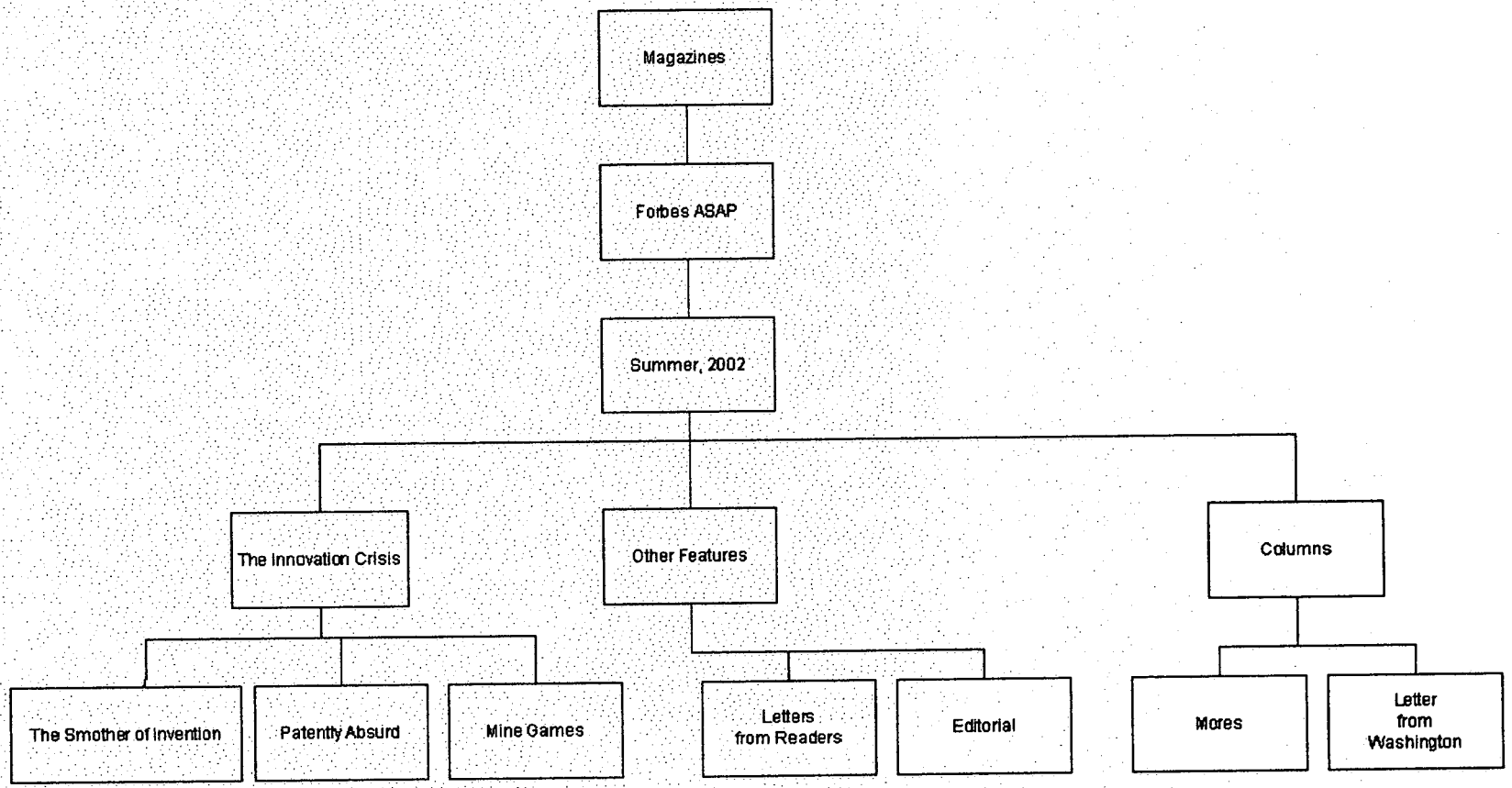


Figure 15

Exemplar of Navigation Levels in Books

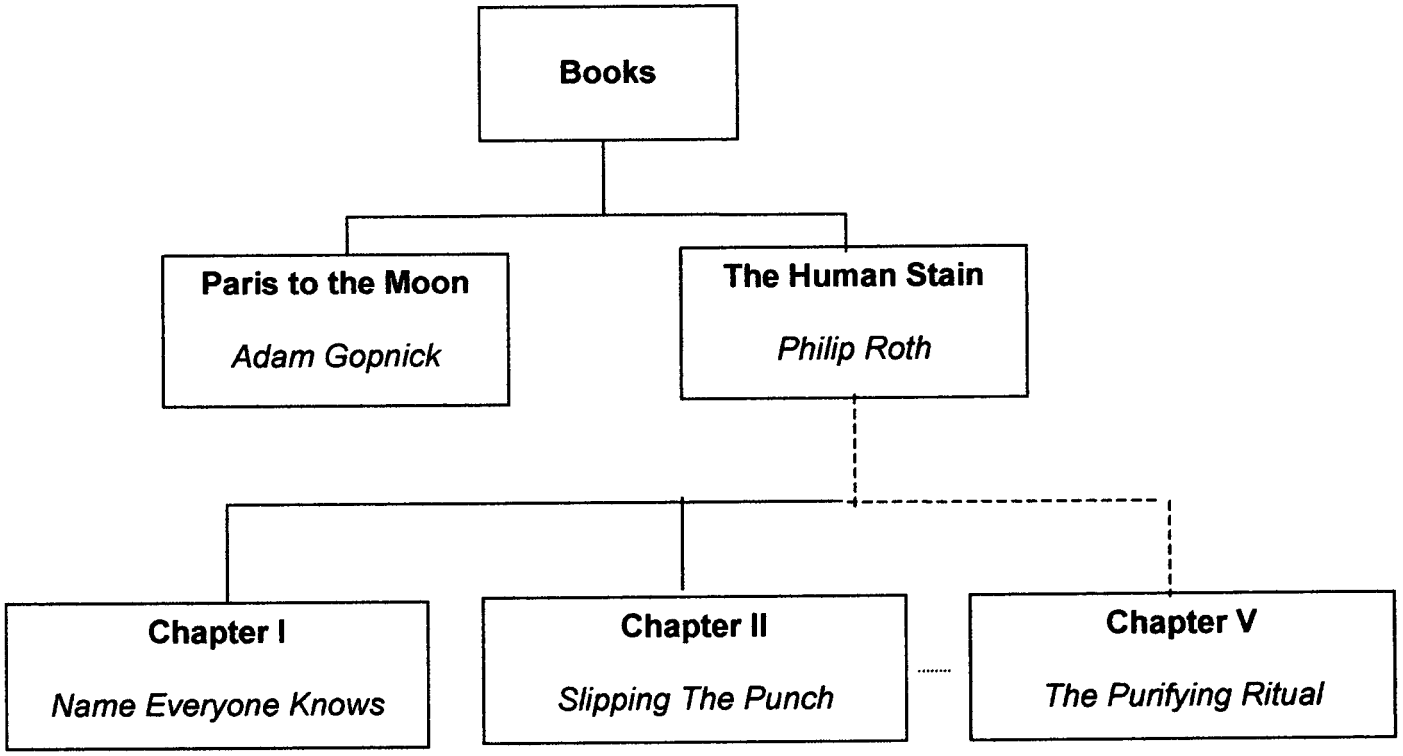


FIGURE 16

Exemplar of Catalog

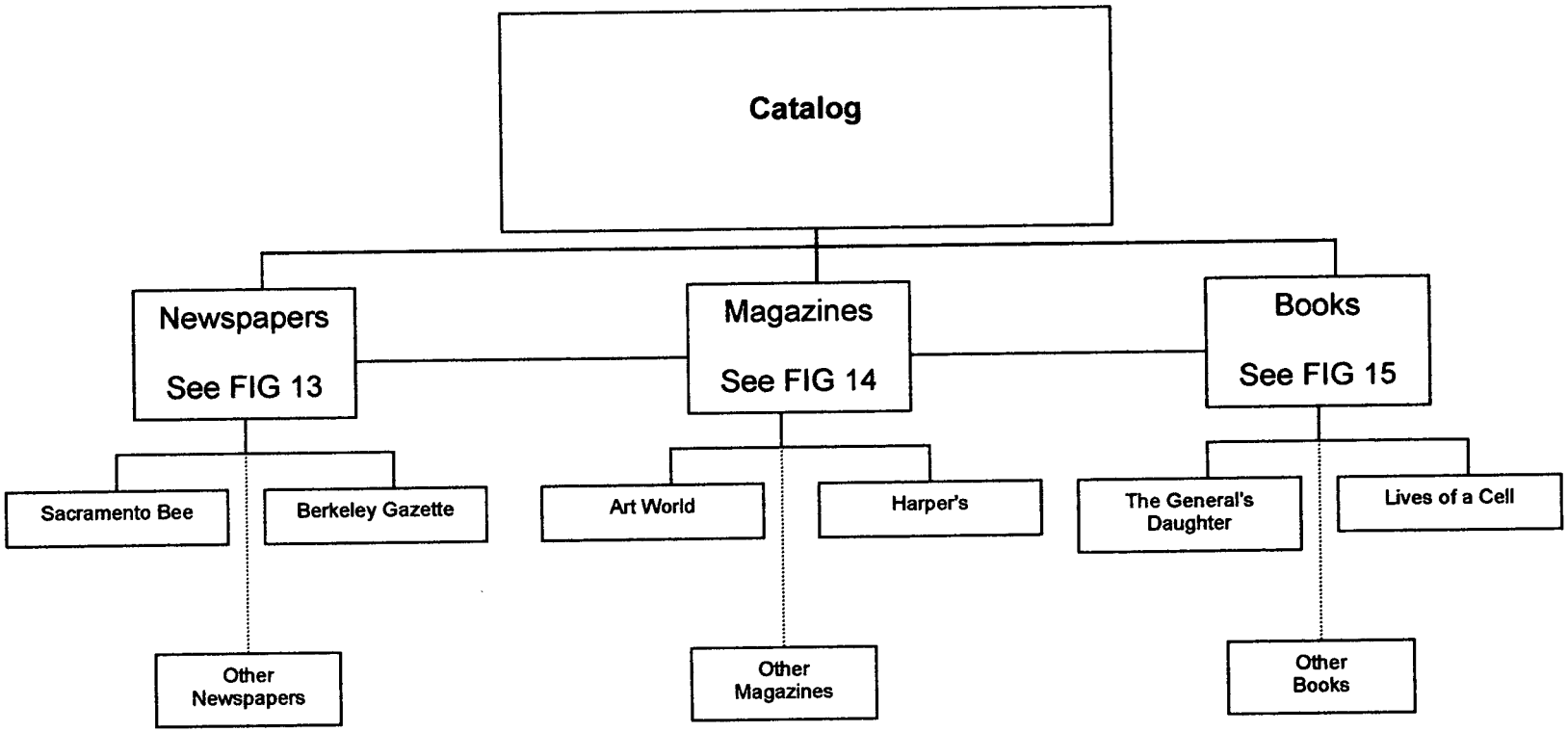


Figure 17

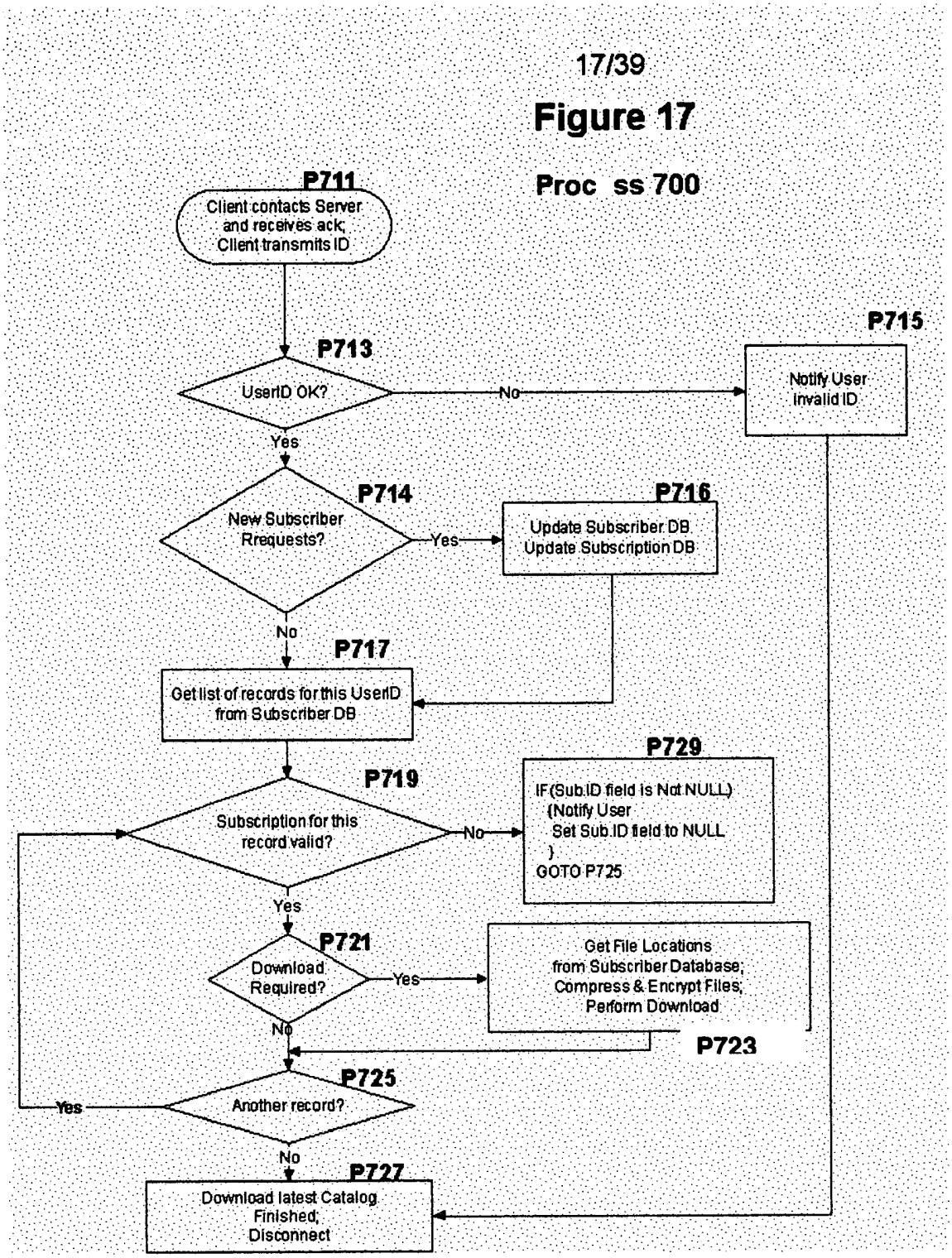

Proc ss 700
P711
Client contacts Server and receives ack; Client transmits ID
P713
UserID OK?
No
P715
Notify User Invalid ID
Yes
P714
New Subscriber Rrequests?
Yes
P716
Update Subscriber DB Update Subscription DB
No
P717
Get list of records for this UserID from Subscriber DB
P729
IF(Sub.ID field is Not NULL) {Notify User Set Sub.ID field to NULL } GOTO P725
P719
Subscription for this record valid?
No
Yes
P721
Download Required?
Yes
Get File Locations from Subscriber Database; Compress & Encrypt Files; Perform Download
P723
No
P725
Another record?
Yes
No
P727
Download latest Catalog Finished; Disconnect

Figure 18

Preferred Key Functions

1 Volume Down (Fast Reverse)	2 Up (Top)	3 Volume Up (Fast Forward)
4 Back (Beginning)	**5** Select/Read/Jump/Spell/ On (Where am I)	6 Forward (End)
7 Library (Undo)	8 Down (Bottom)	9 Table of Contents
* (11) Next Bookmark (Last Bookmark)	0 Pause On/Off (Spell Mode)	# (12) Set Bookmark Bookmark List*

13 Settings List (Delete)	14 Exit (Favorites List/Add to Favorites)	15 Talking Help (Talking User Guide)

Figure 19: Power ON

Process 500

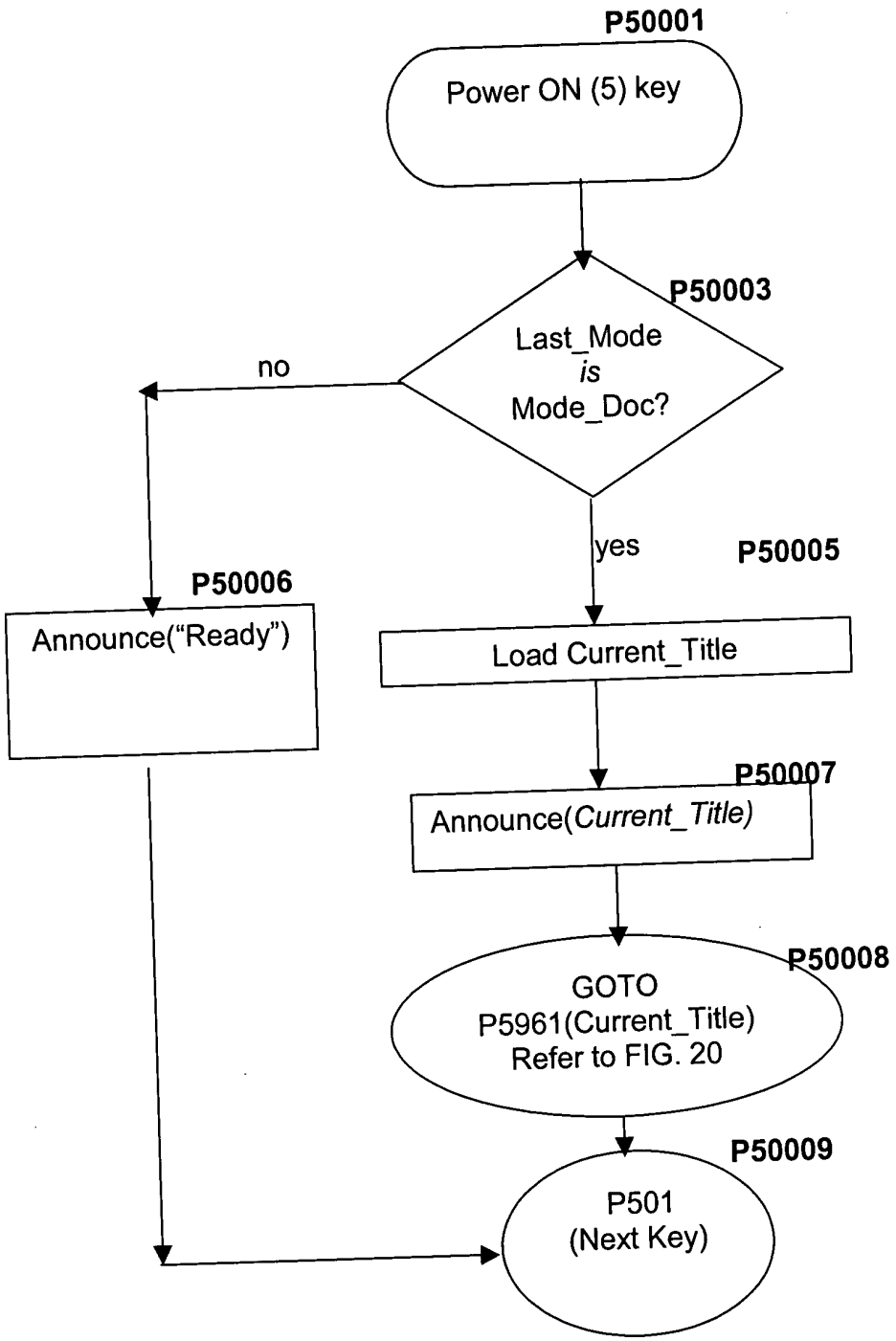


Figure 20: Read Routine

Process 596

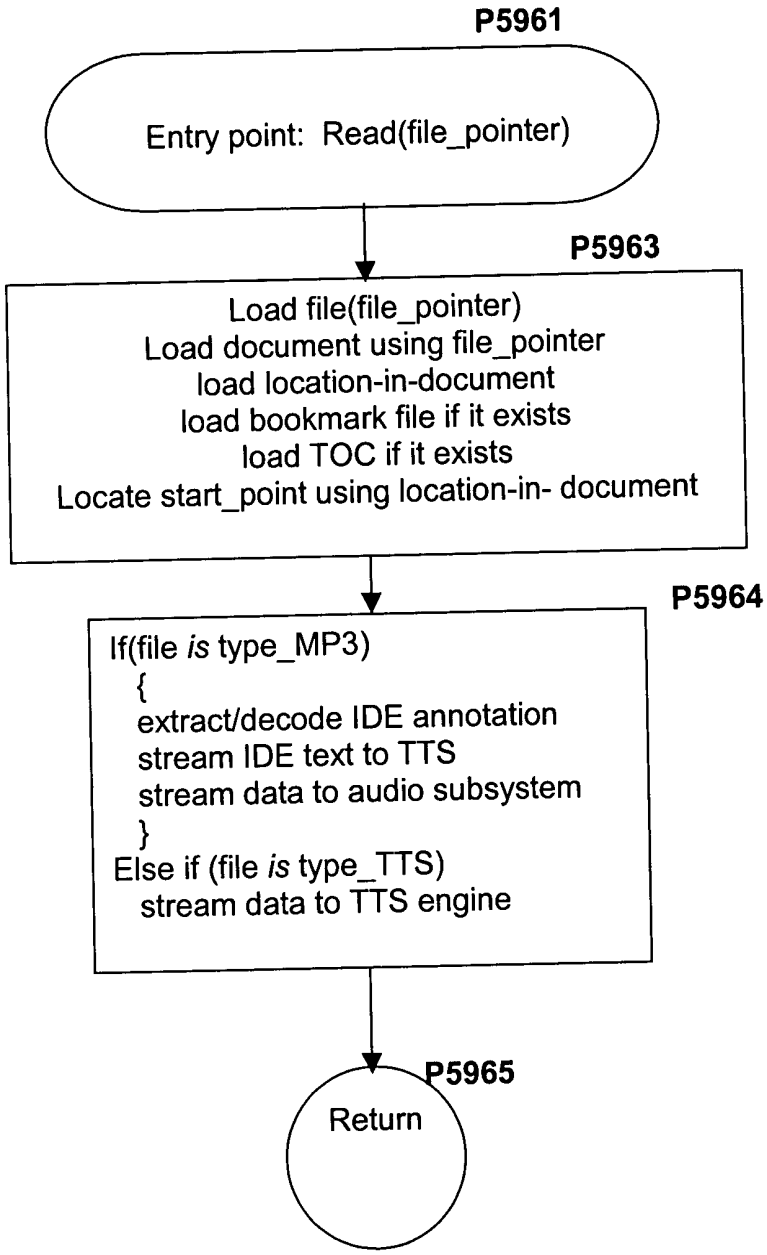


Figure 21 Key Monitoring

Process 501

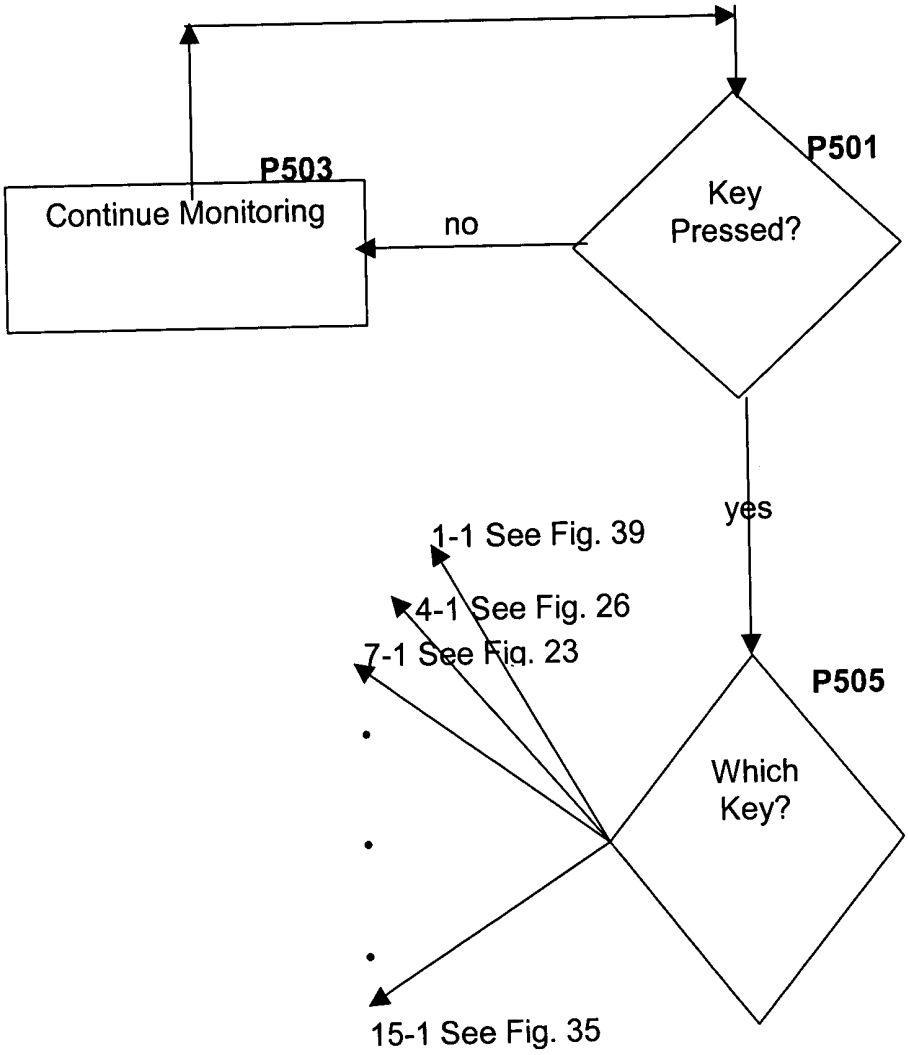


Figure 22: POWER OFF (1 & 3 keys)

Process 598

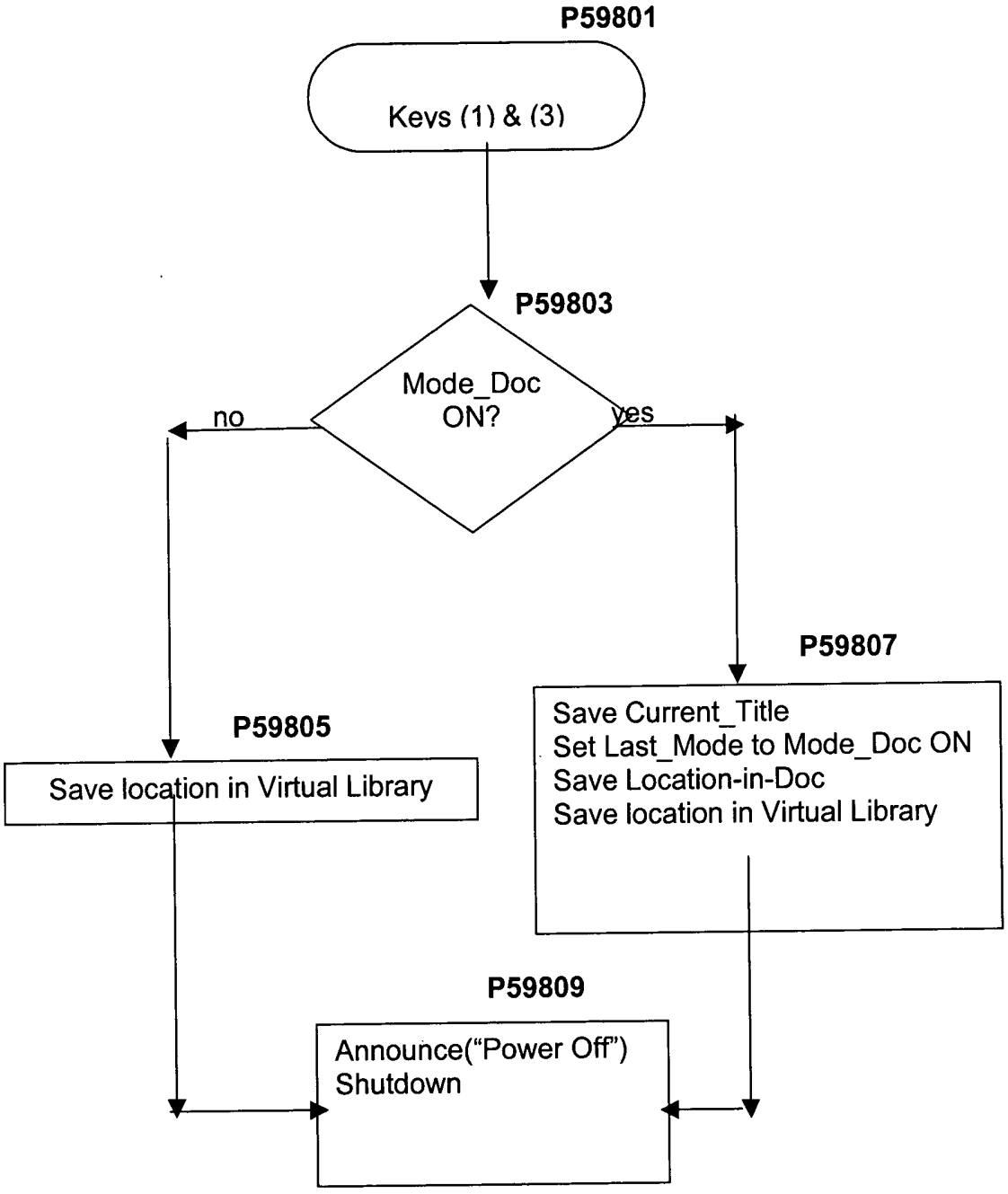


Figure 23: Library Key

Key Code 7.1

Process 571

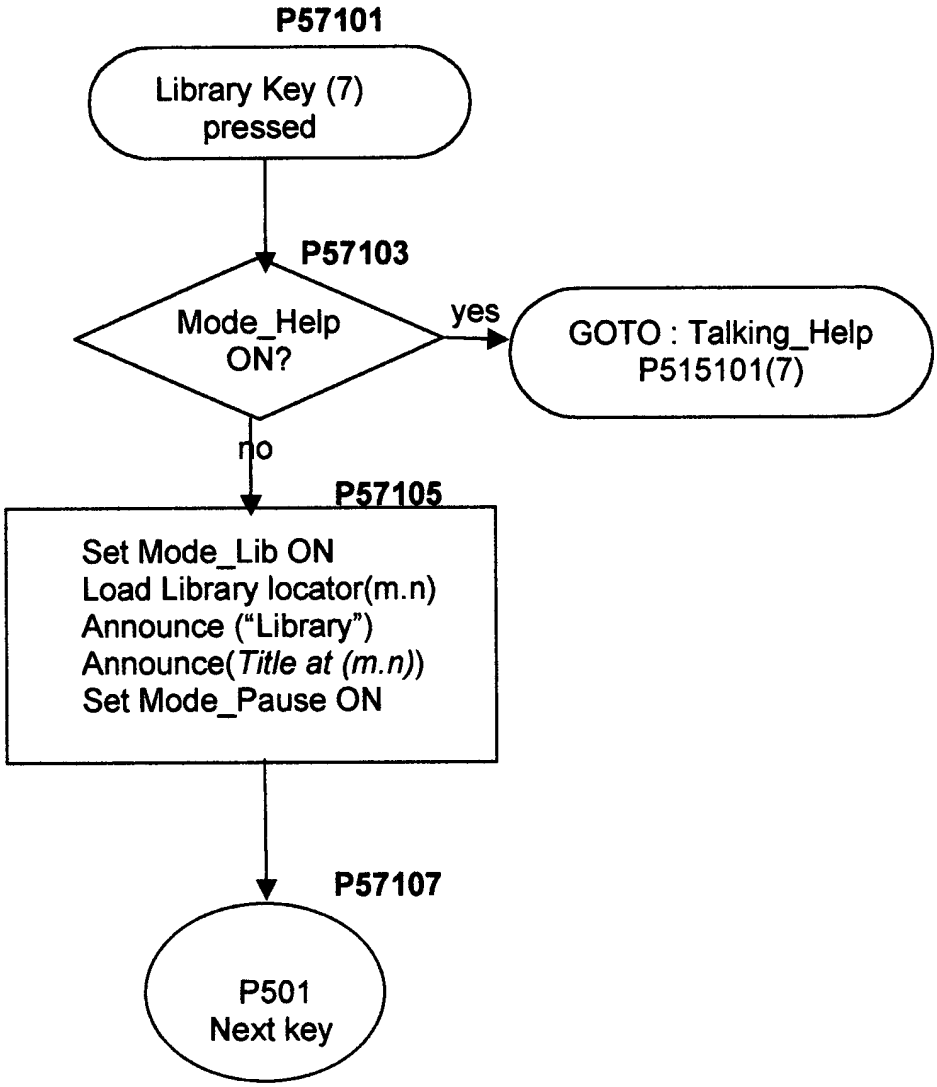


Figure 24: Talking Help Key

Key Code 15.1

Process 5151

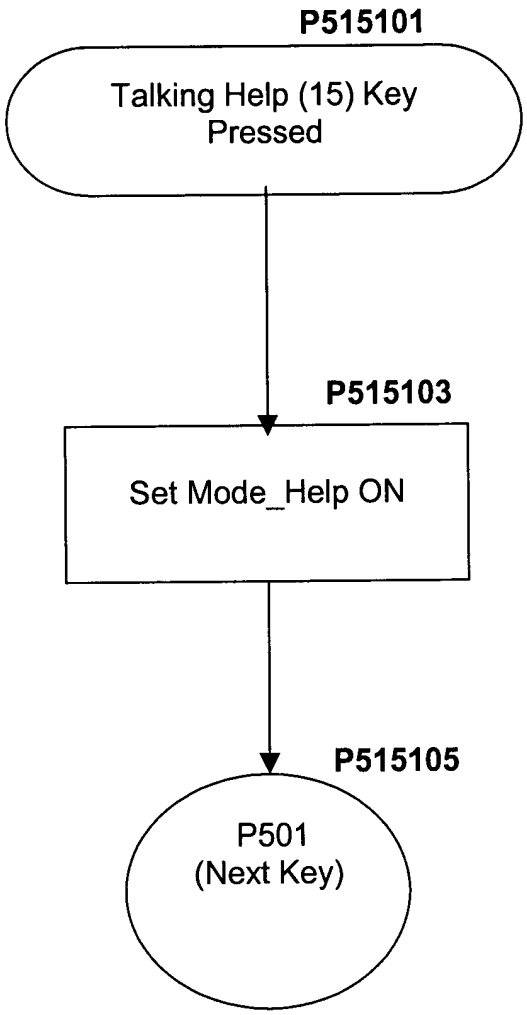
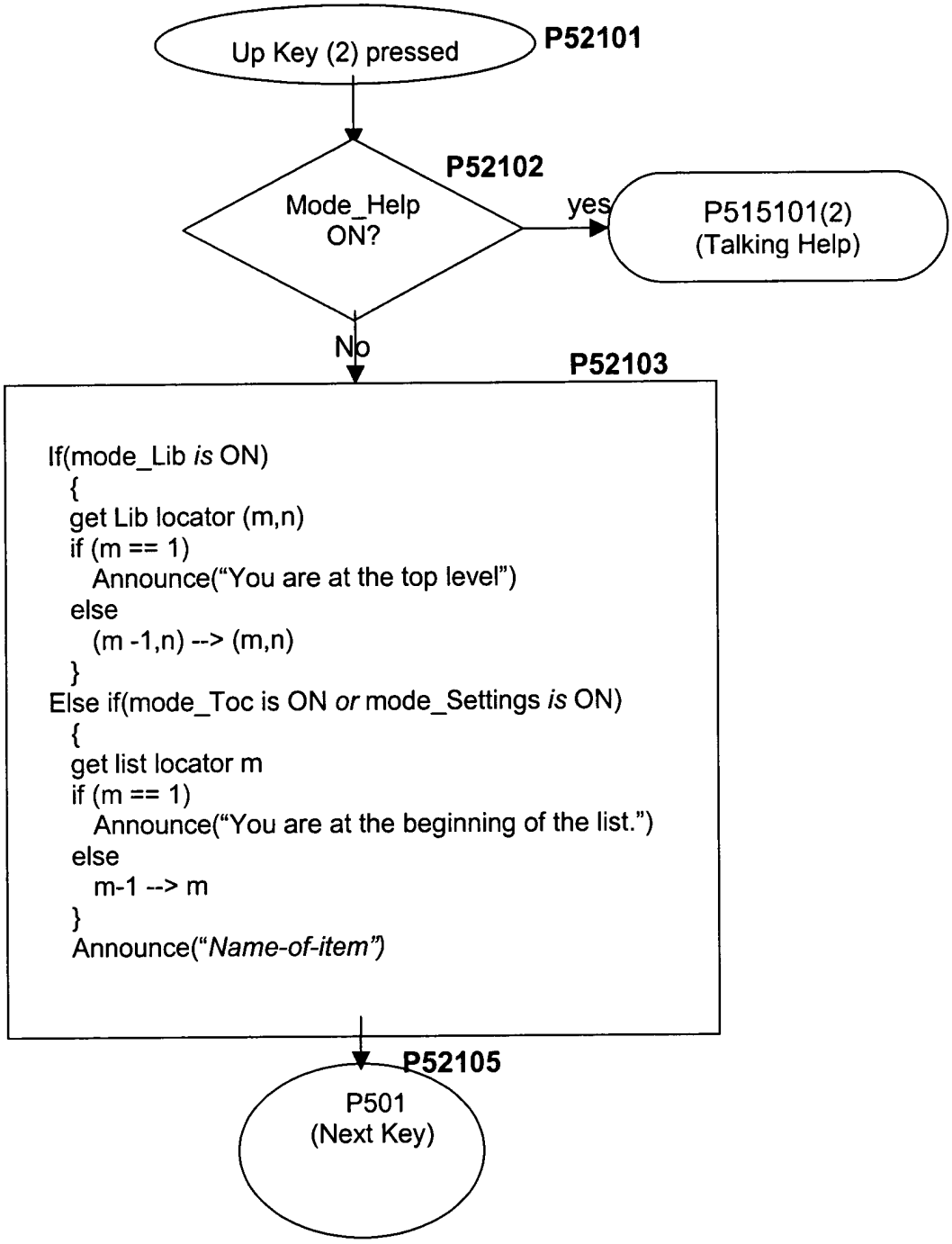


Figure 25: Up Key

Key Code 2.1

Process 521



Figures 26: Back Key

Key Code 4.1

Process 541

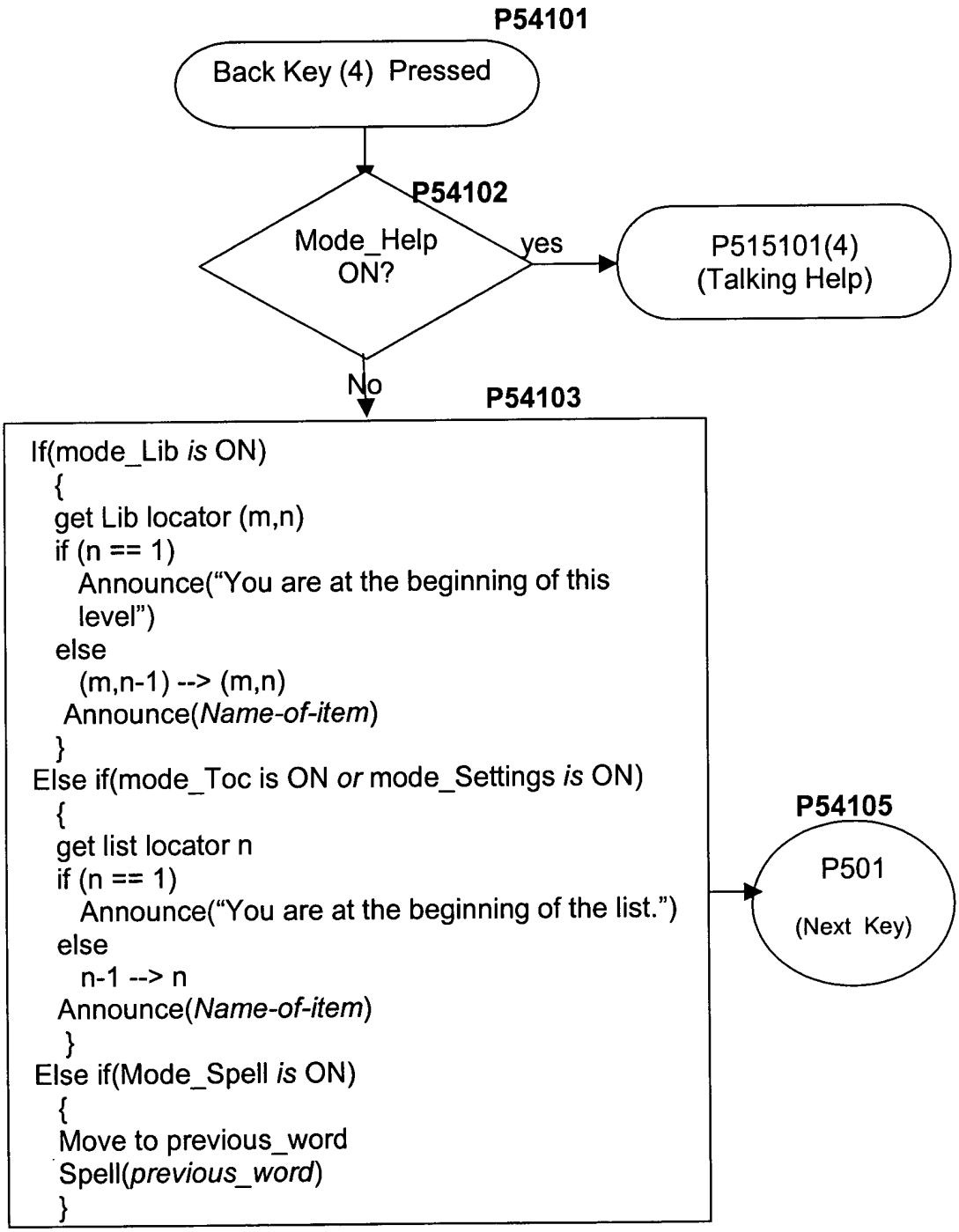


Figure 27: Select/Read/Jump/Spell

Key Code 5.1

Process 551

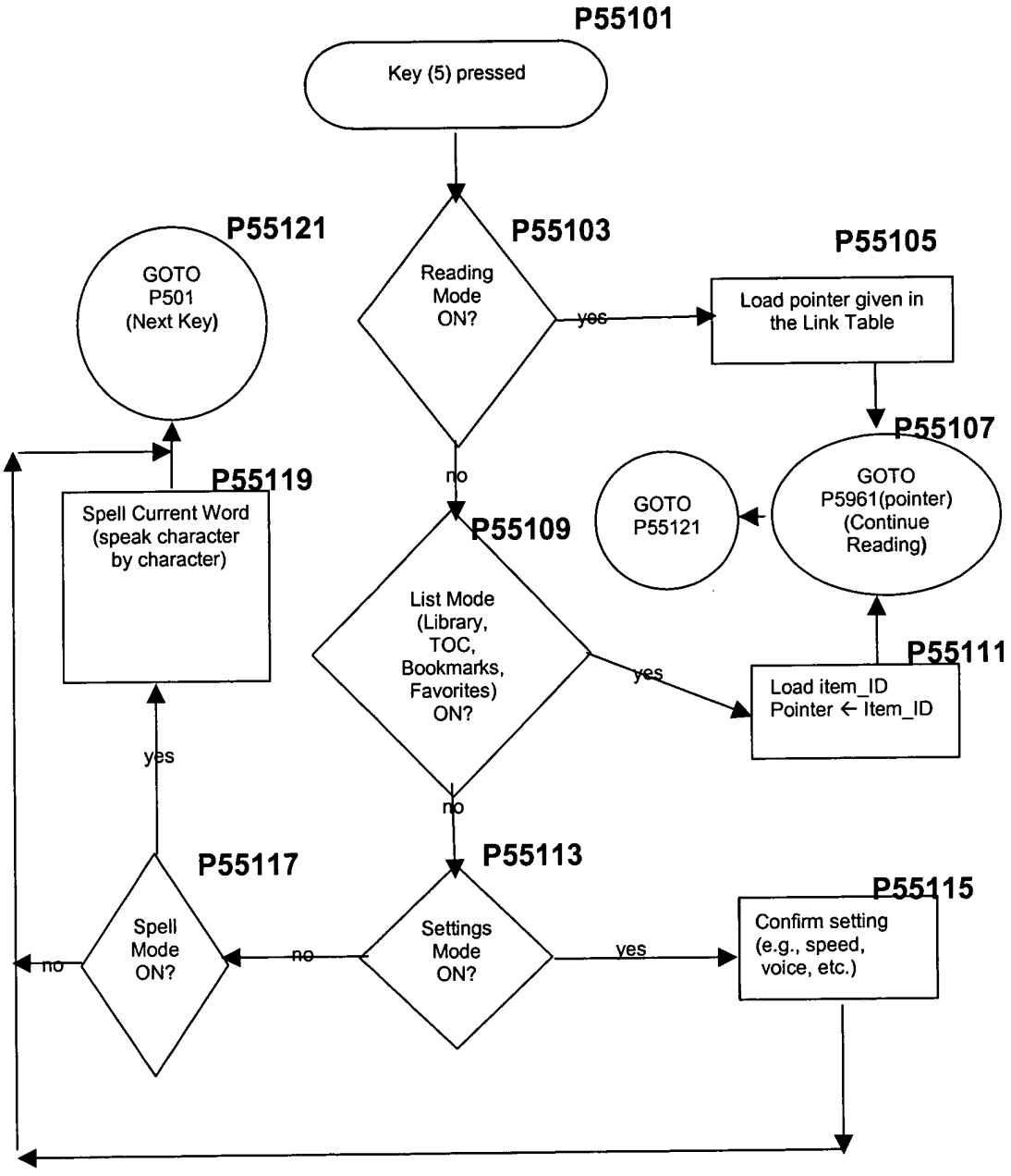


Figure 28: Exit Key

Key Code 14.1

Process 5141

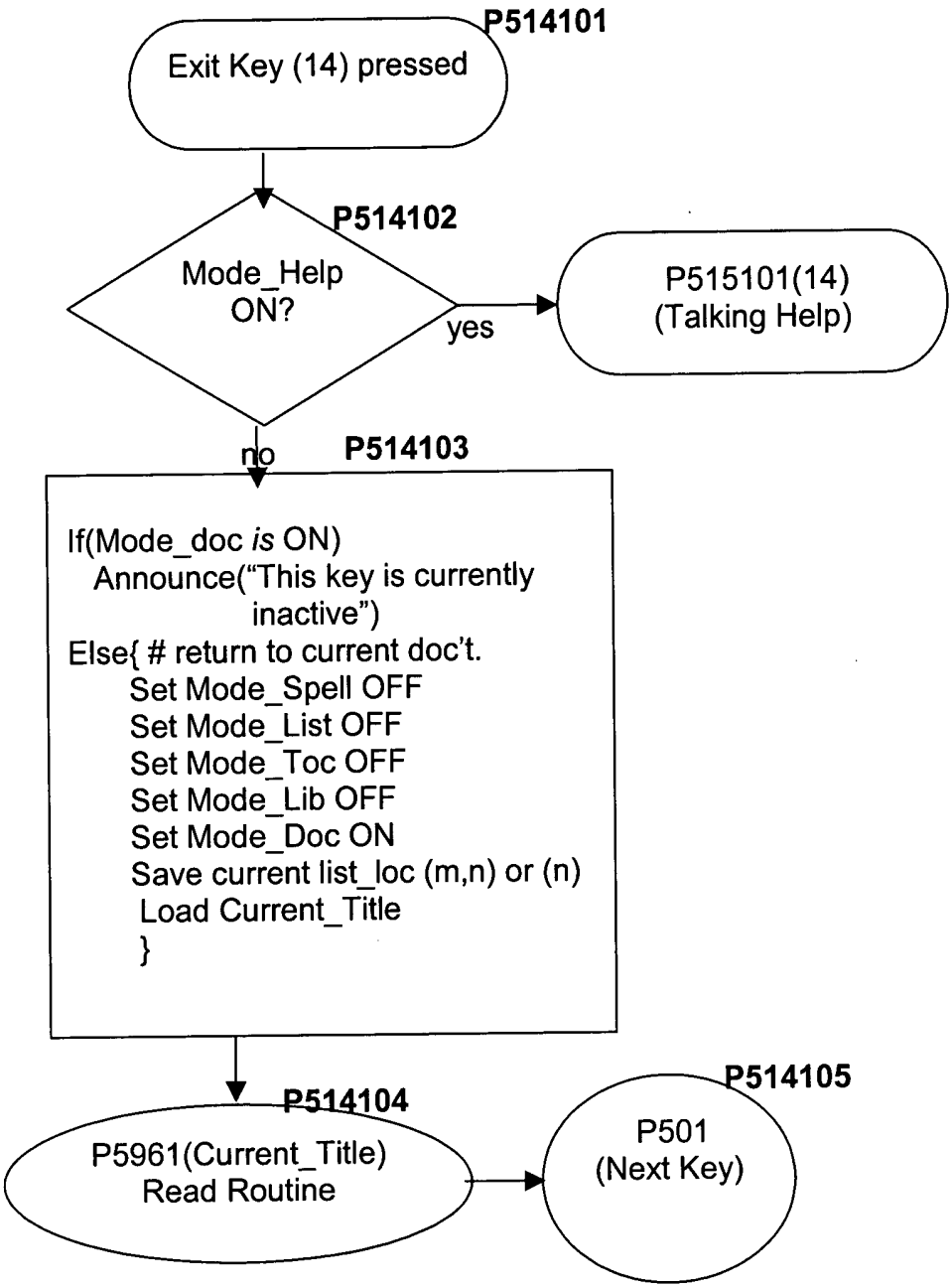


Figure 29: Next Bookmark

Key Code 11.1

Process 5111

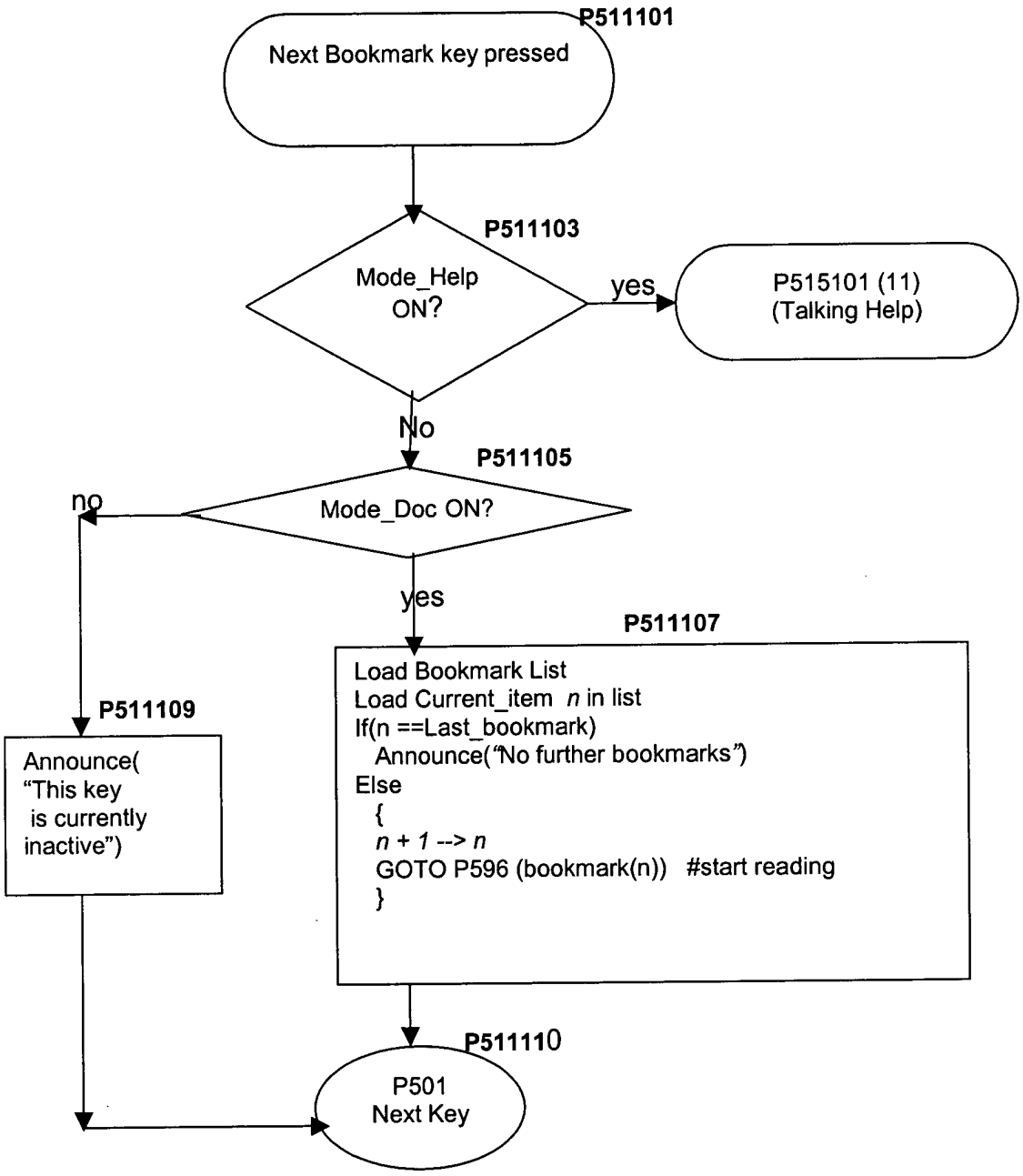


Figure 30: Set Bookmark Key
Key Code 12.1
Process 5121

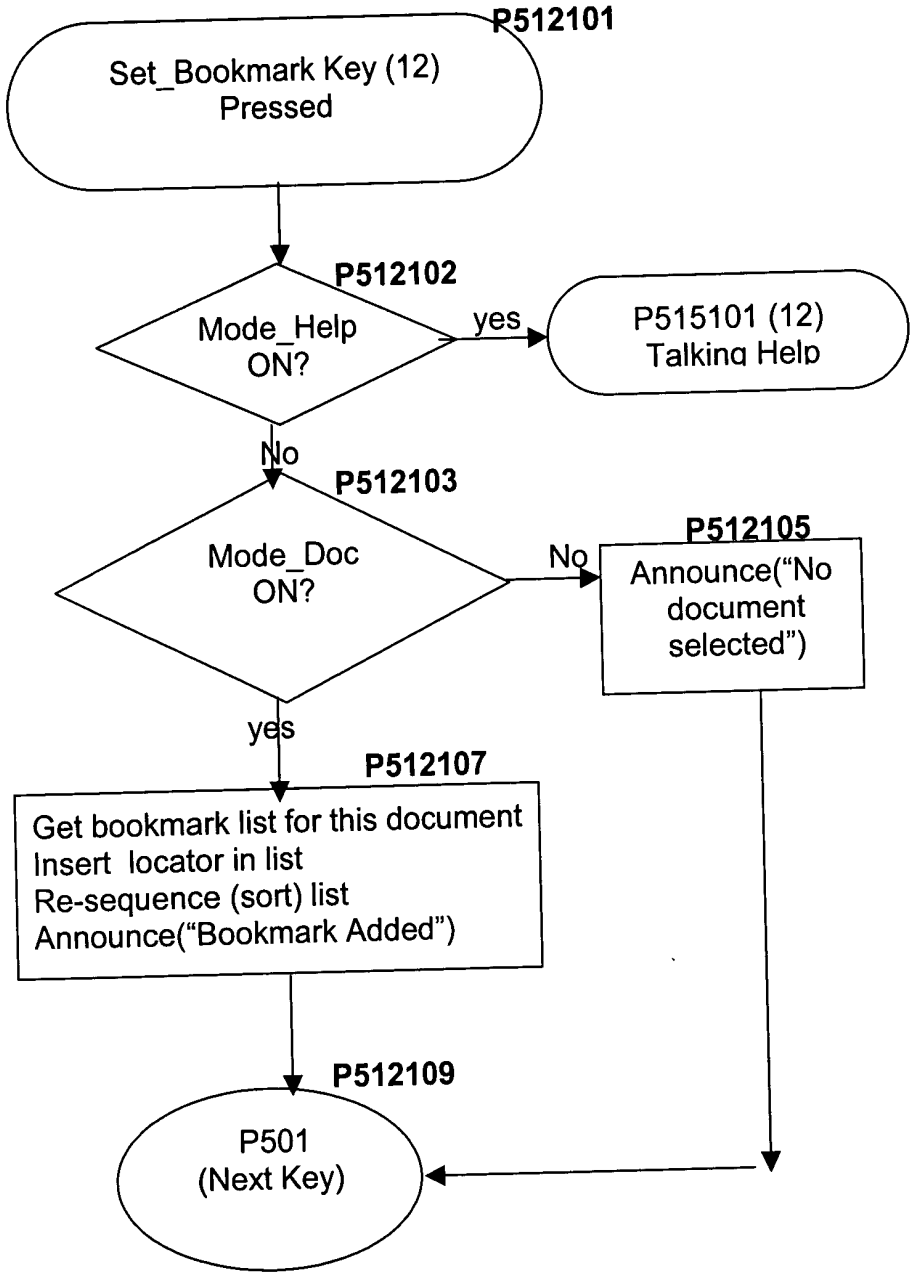


Figure 31: Delete File Key

Key Code 13.2

Process 5132

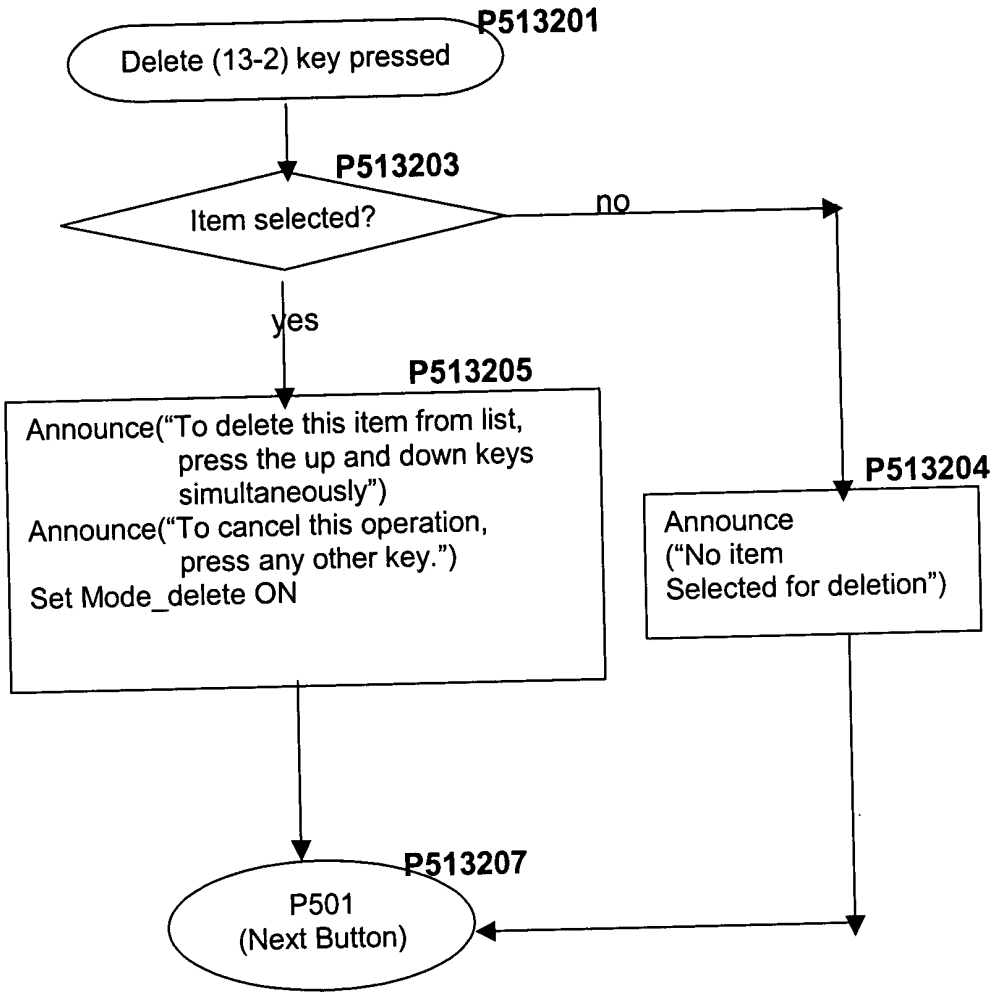


Figure 32: Table of Contents (TOC) Key

Key Code 9.1

Process 591

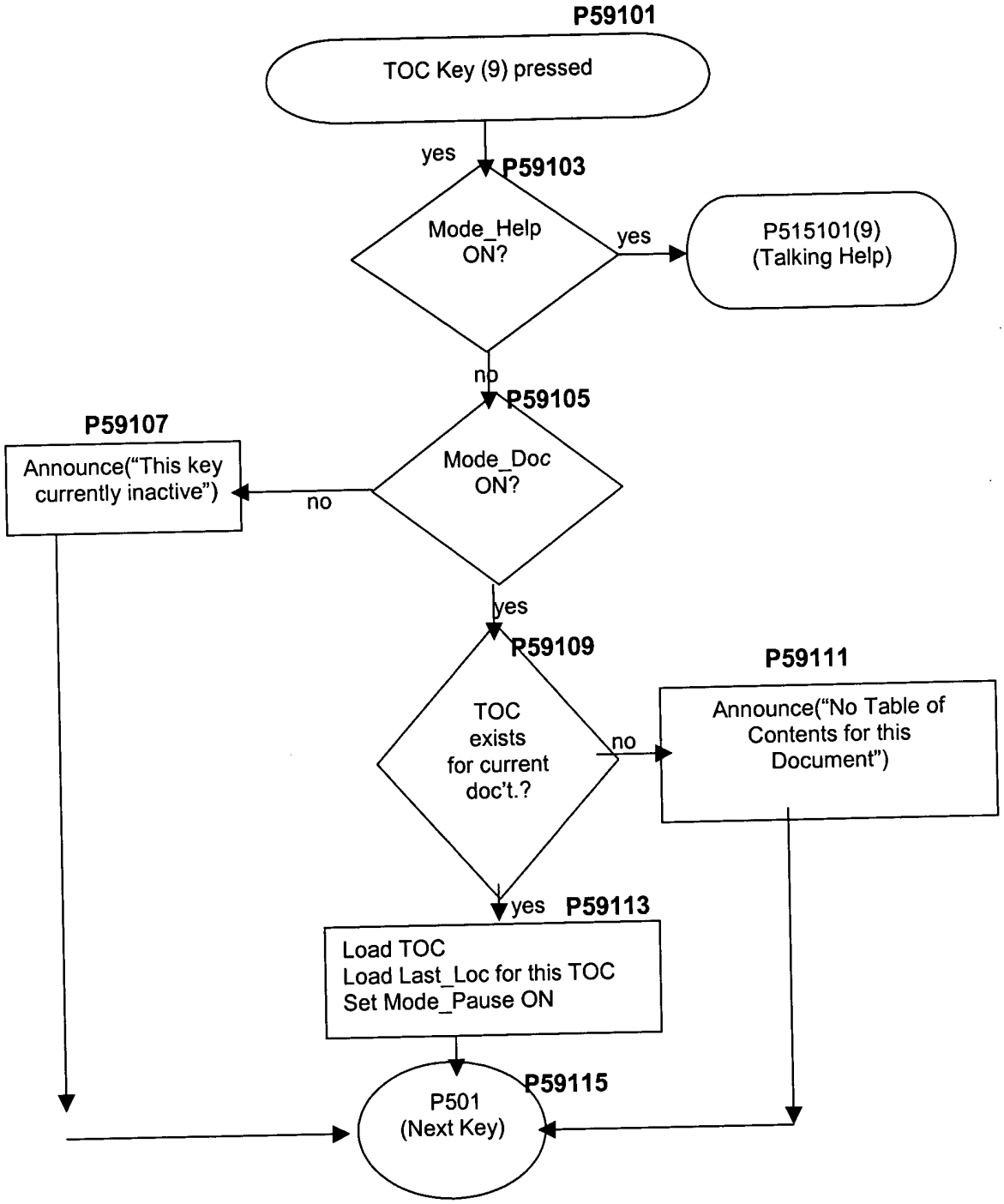


Figure 33: Favorites/Add to Favorites Key

Process 5142

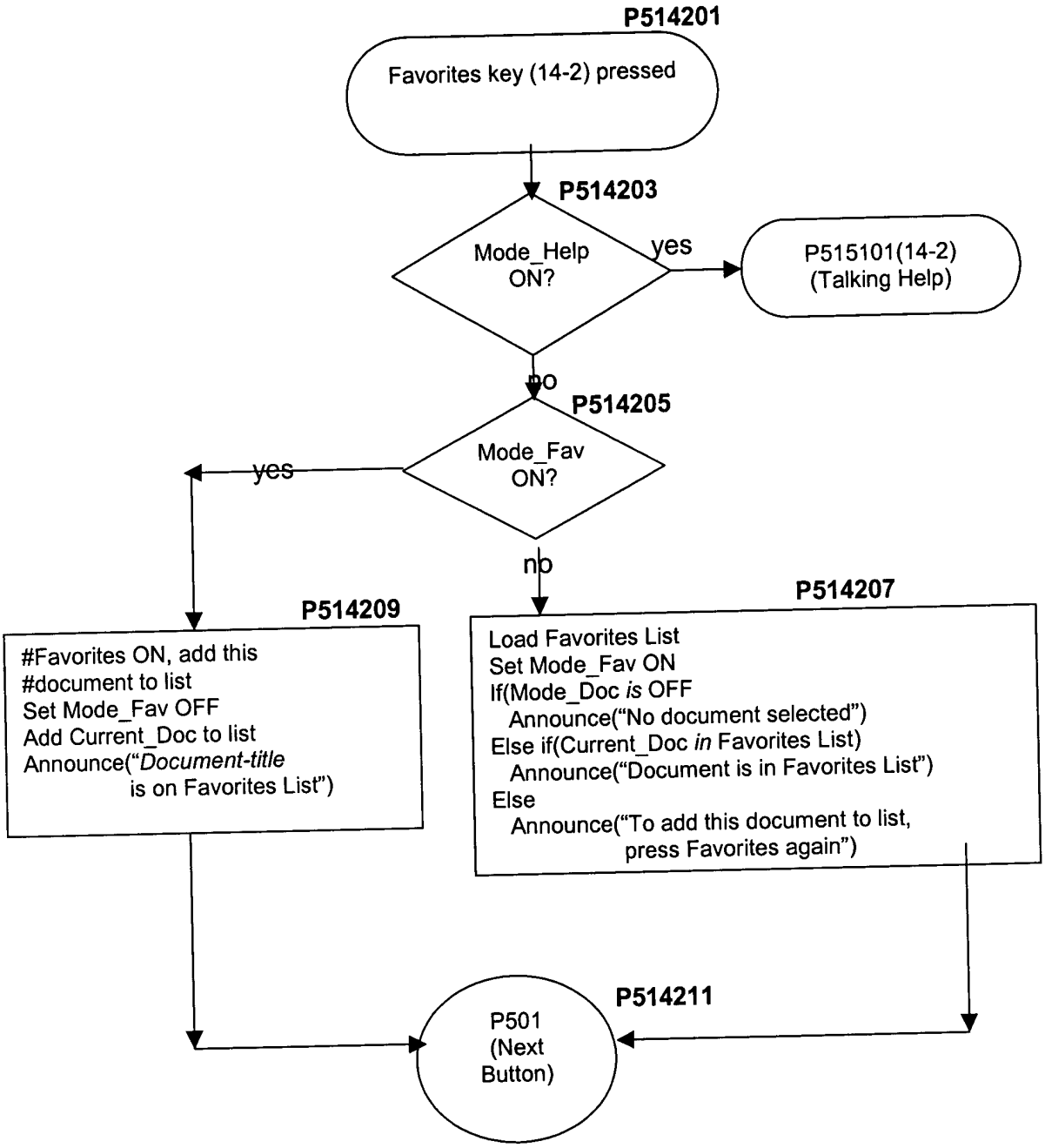


Figure 34: Confirm Delete

Process 597

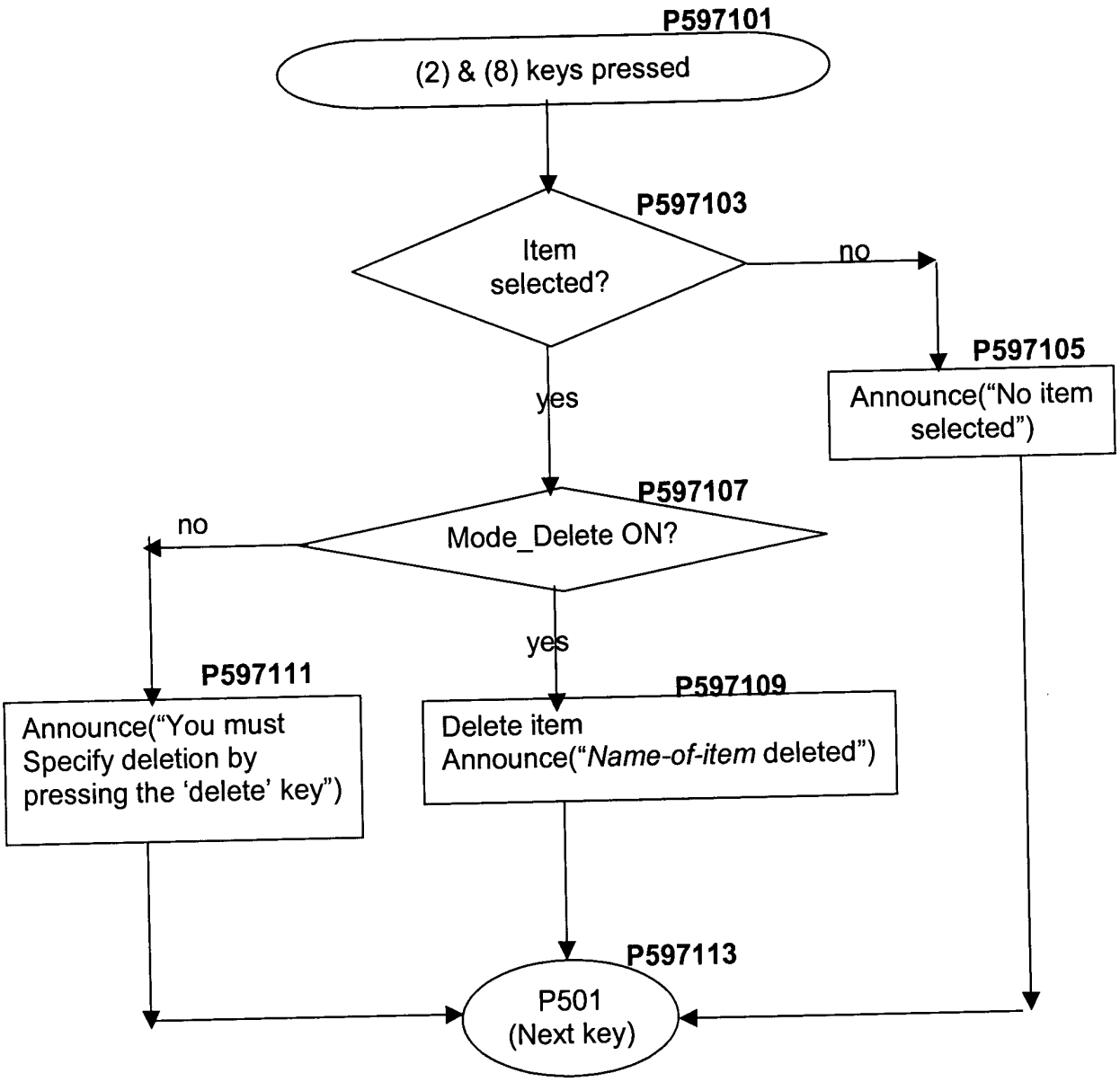


Figure 35: Talking Help Routine

Process P515101

Parameter *n* is Key number

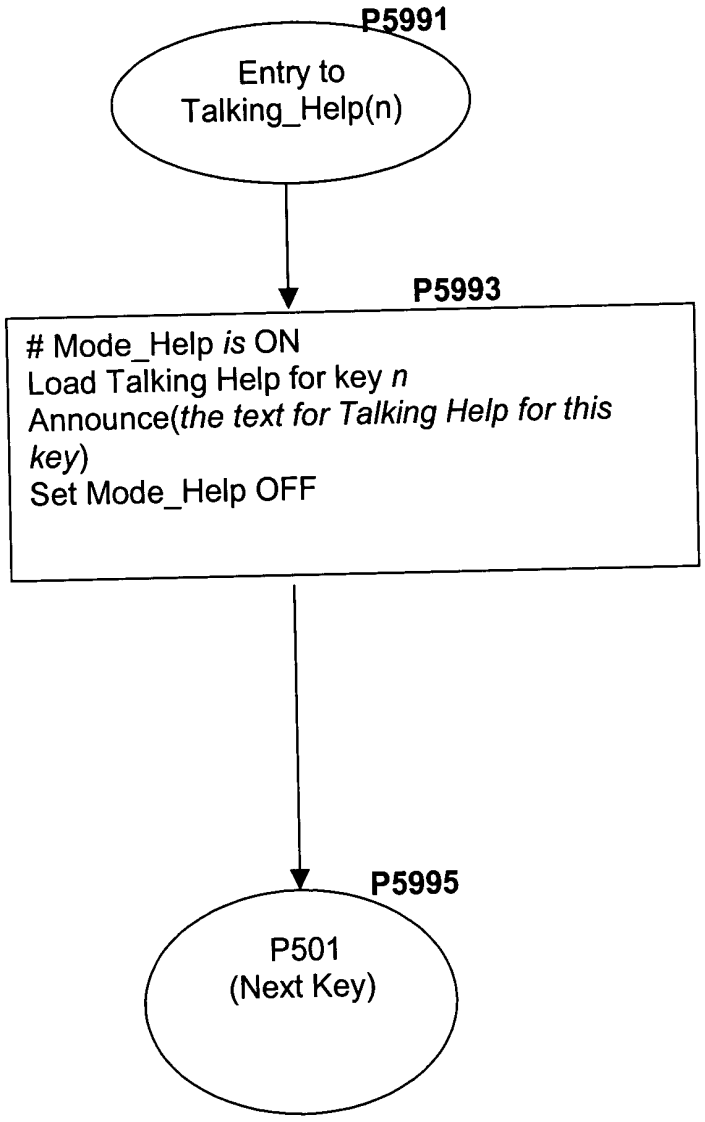


Figure 36: Talking User Guide Key

Process 5152

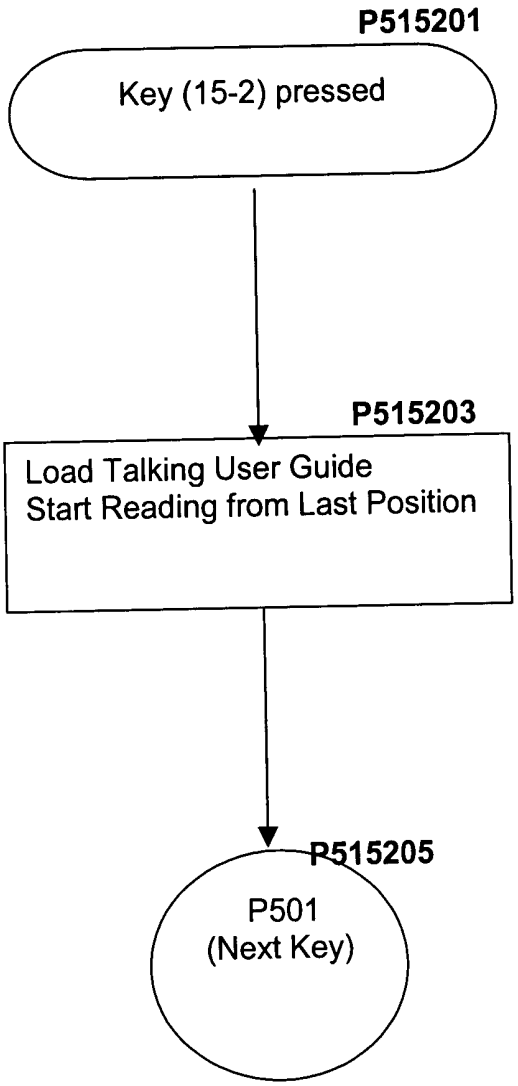
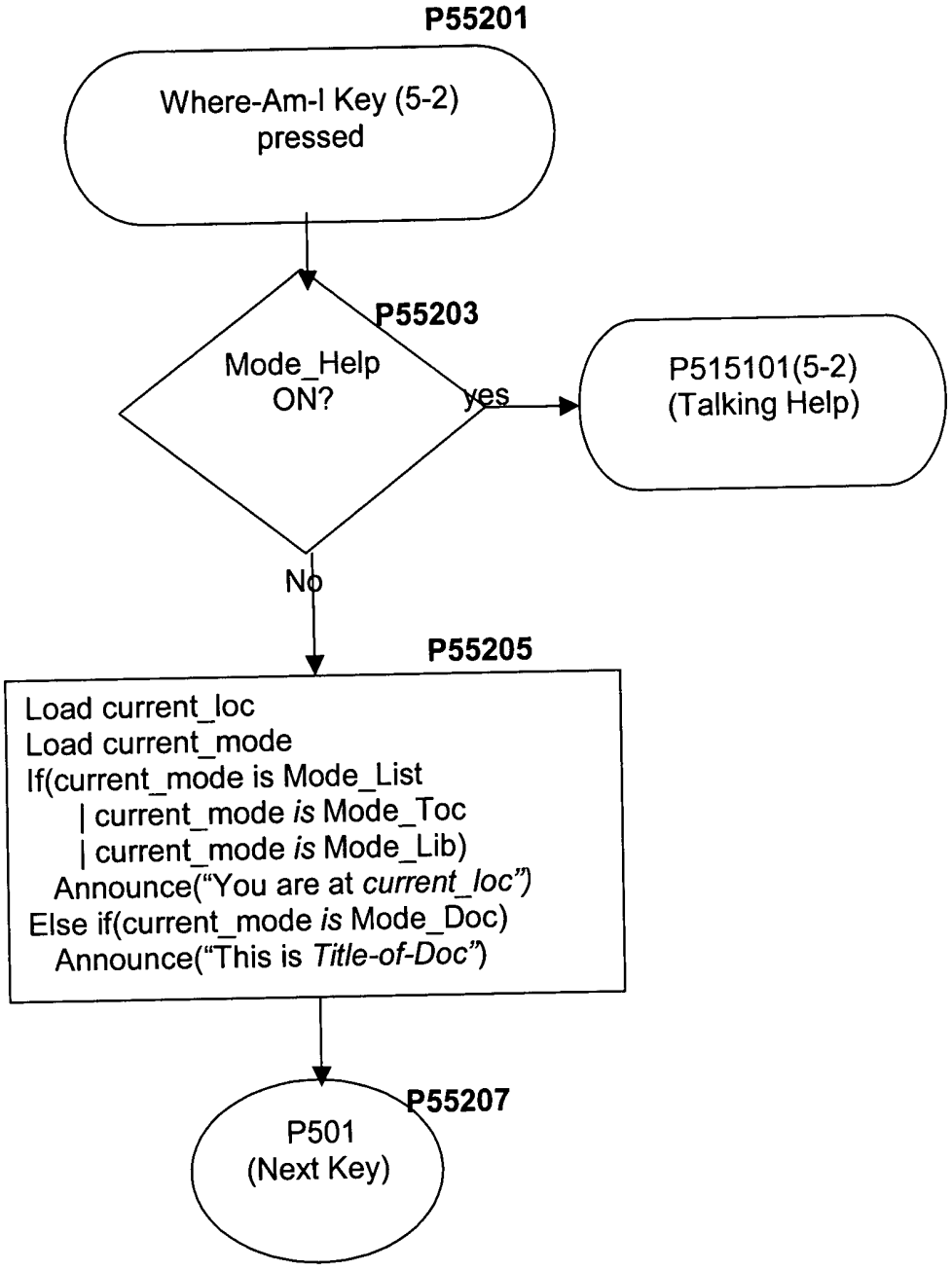
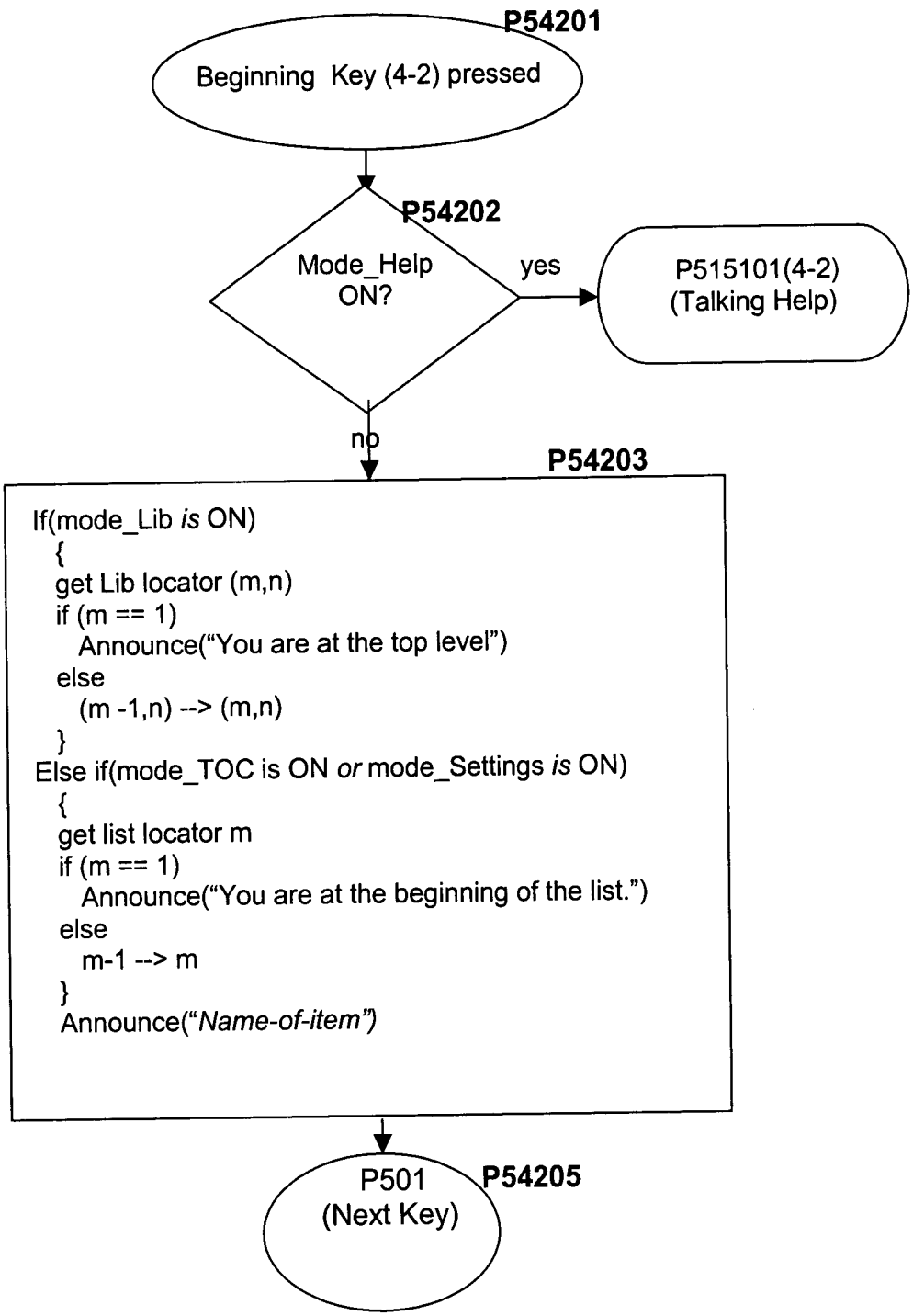


Figure 37: 'Where Am I?' Key

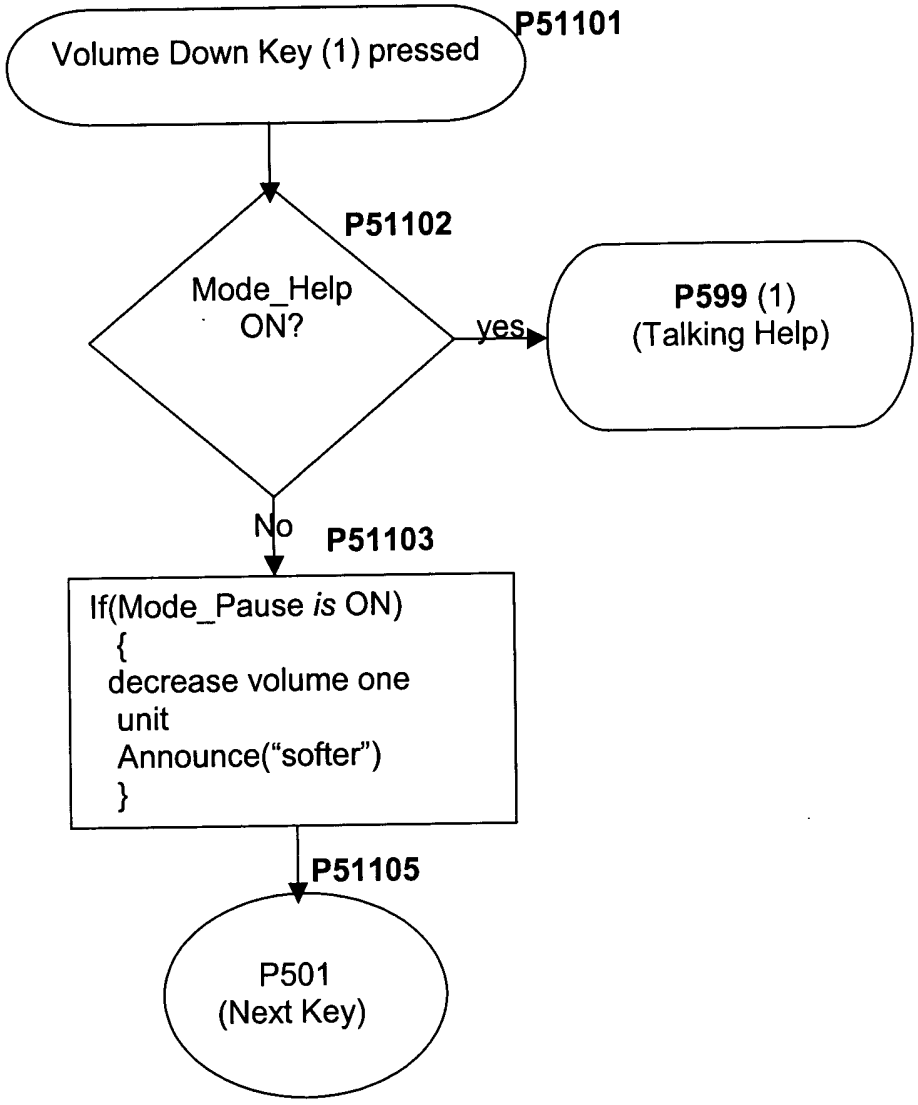
Process 552



Figures 38: Beginning Key Process 542



Figures 39: Volume Down Key

Key Code 1.1

Process 511